THE OHIO STATE UNIVERSITY
WEXNER MEDICAL CENTER

# Inpatient Tobacco Cessation

**PURPOSE:** To provide proper education and recommend treatment to nicotine dependent inpatients in an attempt to improve their hospital stay and overall quality of life.

Upon admission nursing reviews and updates tobacco status in the IHIS Admission Navigator – History sections.

**Note:** The social history elements are captured at the patient level – not the encounter level. Information should be asked once, and then verified/updated at subsequent visits across all provider types.

- In order to identify current tobacco users, members of the Respiratory Therapy Patient Education and Evaluation Team will run a tobacco usage report from IHIS **AND** check the EMR of patients with an order "IP Consult to Smoking Cessation" for pharmacotherapy related to tobacco dependence.
- This protocol excludes inpatients in Intensive Care beds and Neuropsych patients.
- Based on those lists, RT will verify patient identification and ask the patient for permission to discuss their tobacco usage.
- If patient agrees, determine nicotine dependency by asking the following questions:

| Questions | Answers | Points |
|---|---|---|
| How soon after you wake up do you smoke your first cigarette? | Within:<br>• 5 minutes<br>• 6−30 minutes<br>• 31−60 minutes<br>• After 60 minutes | <br>3<br>2<br>1<br>0 |
| How many cigarettes per day do you smoke? | • ≥ 31<br>• 21−30<br>• 11−20<br>• ≤ 10 | 3<br>2<br>1<br>0 |

| Total Points | Level of Dependence |
|---|---|
| **0−2** | Mild dependence |
| **3−4** | Moderate dependence |
| **5−6** | Severe dependence |

- In a personalized manner, urge the tobacco user to quit.
- Assess the patient's willingness to quit and ask if they would like more information about tobacco cessation.
  - If yes, refer to handout / resources for tobacco cessation resources available on OneSource.
- Based on evaluation, determine if nicotine replacement therapy (NRT) is appropriate, and obtain an order for NRT of choice from appropriate member of patient's care team (e.g., physician or mid-level provider).
- See **page 2** for pharmacotherapy recommendations.
  - Enter orders in IHIS.
  - Document the activity in IHIS under "Smoking Cessation Brief" in Doc Flowsheets.
- If patient has a current NRT order that is not appropriate, contact a member of patient's care team and review overall evaluation of patient's nicotine dependence and suggest appropriate NRT plan.
- **Controller Nicotine Replacement Therapy:** Criteria used to recommend NRT:

| Number of Cigarettes | Smokeless Tobacco Use | Recommended Controller NRT |
|---|---|---|
| < 20 per day | < 1 pouch/can per week | Nicotine Patch 14 mg applied to skin every morning. Remove old patch. |
| 20−30 per day | 1 pouch/can per week | Nicotine Patch 21 mg applied to skin every morning. Remove old patch. |
| 30−40 per day | 2 pouch/can per week | Nicotine Patches totaling 35 mg applied to skin every morning. Remove old patches. |
| > 40 per day | 3+ pouch/can per week | Nicotine Patches totaling 42 mg applied to skin every morning. Remove old patches. |

- **Rescue NRT:** patient may choose one depending on preference and ability.
  - **Nicotine Gum**: 4 mg prn; 1 piece Q1−2 hr (patient may only use one at a time) 6−15 pieces per day.
  - **Nicotine Inhaler**: Initial dosage 6−16 cartridges/day for 3−12 weeks. One cartridge is 80 inhalations.
- **Controller and Rescue NRT Exclusion Criteria:** Known allergy to any of the ingredients, currently using nicotine replacement therapy, or abstinent from tobacco for the past 30 days or more.
- **Relative contraindications to controller and rescue NRT use**: Pregnancy, pipe or cigar use, recent acute MI, or severe chest pain or irregular life-threatening heart rhythm.

**NOTE:** Patients cannot smoke, chew tobacco, use snuff or use any other nicotine containing product while on any of the above nicotine replacement therapies.

## Pharmacotherapies to Treat Nicotine Dependence

**Note:** Medication selection should be individualized based on cost to the patient, efficacy, side effects, and previous response to treatment. No one medication is best for every patient.

| Pharmacotherapy | Treatment | Cost | Efficacy | Side Effects |
|---|---|---|---|---|
| **ON FORMULARY** | | | | |
| **Nicotine Patch*** | • 4 weeks: 21 mg / 24 hours.<br>• Then 2 weeks: 14 mg / 24 hours.<br>• Then 2 weeks: 7 mg / 24 hours.<br>**Note:** Patients weighing < 45 kg or smoking < ½ pack per day should start with 14 mg. | $ | + | + |
| **Nicotine Gum*** | • < 25 cigarettes / day (2 mg / piece).<br>• > 25 cigarettes / day (4 mg / piece).<br>• Use up to 12 weeks, not more than 24 pieces / day. | $ | + | + |
| **Nicotine Inhaler*** | • One dose is one cartridge (approximately 80 puffs/ cartridge).<br>• Recommended dose: 6−12 cartridges/day.<br>• Use up to 6 months.<br>• Taper off doses during final 3 months of treatment. | $ | + | + |
| **Varenicline (Chantix®)****<br>**Note:** Black Box warning*** | • Start one week before quit date at 0.5 mg once daily (3 days) followed by 0.5 mg twice daily (four days) followed by 1 mg twice daily for 3−6 months.<br>• Use for at least 3 months.<br>• Instruct patient to quit on day 8 when dosage is increased to 1 mg twice daily. | $$$$ | ++ | +++ |
| **NOT ON FORMULARY** | | | | |
| **Nicotine Lozenge*** | • Instruct patient to allow one lozenge to dissolve in mouth (do not chew or swallow it) every 1−2 hours during first six weeks; minimum nine lozenges/day, then decrease to one lozenge every 2−4 hours during weeks 7−9 and then one lozenge every 4−8 hours for weeks 10−12. | $ | + | + |
| **Nicotine Nasal Spray*** | • Each dose of spray consists of one 0.5 mg dose to each nostril (1 mg total).<br>• Initial dose: 1−2 doses per hour; increase as needed to relieve symptoms; minimum (8 doses / day) with maximum 40 doses / day or 5 doses / hour.<br>• Duration: 3−6 months. | $ | + | + |
| **Bupropion SR 150 (Zyban® and generics)****<br>**Note:** Black Box warning*** | • Begin treatment 1−2 weeks before quitting smoking.<br>• Initial dose: 150 mg every morning for 3 days, then increase to 150 mg twice daily.<br>• Continue twice daily for 7−12 weeks following quit date.<br>• Can use for long-term therapy 6 months post quit date. | $$ | + | +++ |

* The best results from nicotine replacement are achieved with a combination of daily nicotine patches plus as-needed short-acting nicotine for breakthrough symptoms (e.g., lozenges, gum, inhalers, or sprays).

** Prescribe only if there is a plan for long-term use post discharge.

*** The FDA has issued a Black Box warning for varenicline and bupropion regarding the risk of serious neuropsychiatric symptoms in patients using these products. These symptoms include changes in behavior, hostility, agitation, depressed mood, suicidal thoughts and behavior, and attempted suicide. Patients should be advised to stop taking varenicline or bupropion and contact a healthcare provider immediately if they experience these symptoms or any changes in behavior that are not typical of nicotine withdrawal.

**NOTE:** Electronic cigarettes are not a recommended method of nicotine replacement therapy**.**

# The "5-A's" Model for Treating Tobacco Use and Dependence

## 1. ASK about tobacco use

- For a test that patients can take to determine their level of nicotine dependence, see "Fagerström Test for Nicotine Dependence" on **page 4**.

## 2. ADVISE to quit

- In a clear, strong, and personalized manner, urge the tobacco user to quit.

**Clear**

- "It is important that you quit smoking (or using chewing tobacco) now, and I can help you."
- "Cutting down while you are ill is not enough."
- "Occasional or light smoking is still dangerous."

**Strong**

- "As your clinician, I need you to know that quitting smoking is the most important thing you can do to protect your health now and in the future. The staff and I will help you."

**Personalized**

- Tie tobacco use to current symptoms and health concerns, and/or its social and economic costs, and/or the impact of tobacco use on child and others in the household.
- "Continuing to smoke makes your asthma worse, and quitting may dramatically improve your health."
- "Quitting smoking may reduce the number of ear infections your child has."
- "Quitting smoking will improve your life expectancy."

## 3. ASSESS willingness to make a quit attempt

- Assess the patient's willingness to quit: "Are you willing to give quitting a try?"

**IF "YES"**

- **Outpatient**
  - Help the patient set a quit date (ideally within two weeks).
  - Have patient tell family, friends, and co-workers about quitting and ask for understanding and support.
  - Anticipate challenges to the upcoming quit attempt including nicotine withdrawal symptoms during the first few weeks.
  - Encourage patient to remove tobacco products from his/her environment. Prior to quitting, avoid smoking in places where patient may spend time (e.g., work, home, and car.) Make home smoke free.
- **Inpatient**
  - Consider IP Smoking Cessation Consult performed by Respiratory Therapy (RT).
  - Order pharmacotherapies to treat dependency and/or withdrawal (see table on **page 2** for dosing guidelines).
  - Pharmacotherapies are found in the IHIS Pharmacy pathways.

**IF "NO"**

- "Are you aware that OSUWMC has a '100% No Tobacco Policy'?"
- "The use of cigarettes or tobacco is prohibited within and outside of the hospital property. There are no smoking huts located on the hospital campus."
- "I want to keep you safe and manage your nicotine symptoms. With your permission, I will order nicotine replacement therapy for you."

## 4. ASSIST the patient in quitting

- Arrange for a follow-up office visit or phone call contact with the primary care physician 1−2 weeks after discharge.
- Discuss patient ability to maintain nicotine abstinence during rounds.
- Offer patient Quit Line support (1-800-QUIT-NOW) and other resources.
- Congratulate patients for remaining smoke/ tobacco free.
- If tobacco use has occurred, review circumstances and elicit re-commitment to total abstinence; consider more intensive treatment.

## 5. ARRANGE for follow-up and counseling

Provide practical counseling (problem-solving skills/ training):

- Abstinence. Striving for total abstinence is essential. Not even a single puff after the quit date.
- Past quit experience. Identify what helped and what hurt in previous quit attempts. Build on past successes.
- Anticipate triggers or challenges in the upcoming attempt. Discuss challenges/triggers and how the patient's successfully overcome them (e.g., avoid triggers, alter routines, etc.).
- Alcohol. Alcohol is associated with relapse, consider limiting / abstaining from alcohol while quitting. Reducing alcohol could precipitate withdrawal in alcohol-dependent persons.
- Other smokers in the household. Quitting is more difficult if there is another smoker in the household. Patients should encourage housemates to quit with them or to not smoke in their presence.

## Fagerström Test for Nicotine Dependence

This test helps determine the level of addiction to cigarettes and can be accessed here.

## Resources for Smoking Cessation

- OSUWMC Respiratory Therapy- Tobacco Cessation Resources
- OSUWMC Tobacco Free Environment Policy

## References


- Fiore, MC, et al. Treating tobacco use and dependence, 2008 update. Department of Health and Human Services, Rockville, MD.
- Clinical Practice Guideline. Executive Summary. Rockville, Maryland: US Department of Health and Human Services. Public Health Service May 2008.
- Zarling KK, et al. (2008). Registered Nurse Initiation of a Tobacco Intervention Protocol: Leading Quality Care. *Journal of Cardiovascular Nursing, 2*3(5):443-8
- Baker TB, et al. (2016). Effects of Nicotine Patch vs. Varenicline vs. Combination Nicotine Replacement Therapy on Smoking Cessation at 26 weeks: A Randomized Control Trial. *Journal of the American Medical Association,* 315(4): 371-379.


## Quality Measures

- Percent of patients who were screened for tobacco use status.
- Percent of patients who received or declined counseling to quit **AND** received or declined pharmacotherapy for nicotine dependency.
- Percent of patients who were referred to or declined out-patient counseling and received or declined a prescription for pharmacotherapies for nicotine dependence upon discharge.
- Percent of patients who received a follow-up phone call within 30 days after hospital discharge to determine tobacco use status.

## Guideline Authors


- James N. Allen, MD
- Jerry Mansfield, PhD, RN
- Andrea Yagodich, BS, RRT
- Amanda Zeid, RRT


## Guideline Approved

May 31, 2016. Third Edition.