This toolkit provides a practical approach to treating tobacco dependence effectively. The toolkit approaches tobacco dependence as a severe chronic illness, such as asthma, with exacerbations, and is based on the premise that clinicians must be as actively and professionally engaged in addressing tobacco dependence as they are with asthma.

Consensus recommendations in this toolkit are based both on the evidence in the literature and the experience of the tobacco-dependence treatment community. The tools are better suited for Advanced Practice Nurse (APN) and other Advanced Practice Clinicians. However, it is appropriate for the Registered Nurse (RN) and the Licensed Practical Nurse (LPN) to be well equipped to serve as effective patient care advocates. The toolkit includes treatment algorithms, patient assessment tools, patient management tools, communication and patient education tools, resources for healthcare practitioners, and physician advocacy information. In addition to a guideline, this toolkit provides practical information to effectively address tobacco-dependence as a chronic disease.

**Principles of therapy**
Approaching tobacco dependence as a chronic disease acknowledges the altered central nervous system (CNS) neurobiology in tobacco-dependent patients. Therapy in asthma has the goal of achieving (near) normal airway function; similarly, the goal of therapy in tobacco dependence is to normalize brain function—so that the patient has minimal to no symptoms of nicotine withdrawal. Common nicotine withdrawal symptoms include:

- Dysphoric or depressed mood
- Insomnia
- Irritability, frustration, or anger
- Anxiety
- Difficulty concentrating
- Restlessness
- Decreased heart rate
- Increased appetite or weight gain
The goal of tobacco-dependence therapy is to control and minimize these withdrawal symptoms through individualized treatment, thus allowing the patient to feel (near) normal while not using tobacco. The intensity of treatment should be based on the severity level of nicotine dependence. For highly nicotine-dependent patients, combination therapy is often needed.

In asthma, both long-acting controllers and quick-acting relievers are used; a similar approach can be used in tobacco-dependence treatment. Nicotine patches, bupropion, and varenicline can be thought of as controllers. As in asthma, for those with moderate to severe disease, combination of controller with rescue or reliever therapy is often needed to achieve therapeutic goals. Nicotine gum, lozenge, inhaler, and nasal spray can be thought of as relievers, for as-needed use to relieve exacerbations. A green-yellow-red zone action plan can be provided to the patient. Continuing the asthma analogy, medication is stepped down not according to a fixed time schedule, but as disease control permits. If the nicotine withdrawal symptoms are well-controlled, stepping down medication can be considered. If withdrawal symptoms are not well-controlled, consideration should be given to stepping up medications.

**ARMR Model**

Based on a chronic disease model, tobacco-dependence treatment should follow the ARMR: 

- **A**ssess and diagnose:
  - The Fagerström Test for Nicotine Dependence (FTND) is used to assess level of nicotine dependence. Pediatric assessment can be done with the Modified Fagerström Tolerance Questionnaire (mFTQ) to assess nicotine dependence and/or the Hooked on Nicotine Checklist (HONC) to assess autonomy over smoking behaviors.
  - Assess for previous history of or current psychiatric co-morbidities, such as depression, dysphoria, bipolar disorder, and post-traumatic stress disorder (PTSD)

- **R**ecommend a treatment plan:
  - The treatment plan should be based on the level of nicotine dependence, with more dependent patients needing more aggressive therapy.
  - For moderate to severe tobacco dependence, the combination of a controller and reliever medication is most beneficial.
• **Monitor** the treatment plan’s outcome:
  o The Nicotine Withdrawal Symptom Scale (NWSS) is used to determine adequacy of control of withdrawal symptoms for patients already on treatment.
  o Depression, anxiety, suicidality, and other psychopathology are more common in smokers. Inadequate tobacco-dependence therapy may unmask these problems. Rarely, controller medications (nicotine patch, bupropion, or varenicline) have been associated with depression and suicidality.
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  o Clinicians treating tobacco dependence should routinely monitor for the development of psychiatric problems at each office visit, and, depending on the underlying cause, either increase nicotine replacement therapy, change control medications, or increase the doses of controller medications. In such cases, the treating physician should also consider psychiatric referral to determine whether these changes reflect an underlying or emergent psychiatric state or are merely nicotine withdrawal symptoms.

• **Revise** the treatment plan to improve its effectiveness and minimize side effects.
  o Base effectiveness on achieving control of nicotine withdrawal (rather than treating for a fixed time limit like 6 weeks). The patient and physician should decide together whether treatment needs to be escalated, can be stepped down, or can be discontinued. Just like any chronic disease, including asthma, re-exposures or exacerbations may occur that require a temporary increase or re-institution of medication.
  o If reliever/rescue medication is needed with high frequency (>10-15 times a day), consider escalation of the controller medication regimen, such as by increasing the nicotine patch dose or by adding a second controller medication.

**Reduction toward cessation**
Tobacco-dependent patients who are not yet ready to stop smoking may benefit from use of a nicotine patch or bupropion to help them reduce their smoking and prepare for stopping completely.
Relapse
Relapse is common in tobacco-dependent patients, particularly those whose treatment plan is inadequate. Relapse prevention are best discussed 4-6 weeks after stopping smoking and when nicotine withdrawal symptoms are well-controlled. Triggers for relapse may include:

- Stress (or other negative mood states); particularly when stress occurs in the presence of another smoker, or with alcohol consumption
- Sudden or unexpected re-appearance of nicotine withdrawal symptoms during the time of celebration or with modest amounts of alcohol

Plans to prevent relapse in at-risk situations can include the following strategies:

- Think something different
- Do something different
- Use nicotine Rescue Medication to prevent exacerbations, relapse, or re-exposure

Tobacco dependence in pregnant women or women of childbearing age
Smoking is one of the most important modifiable causes of poor pregnancy outcomes in the US. Ideally, women who smoke should be treated effectively for tobacco dependence BEFORE they become pregnant. Stopping smoking during pregnancy can still improve fetal outcomes. Behavioral counseling is advised as first-line therapy for tobacco-dependent pregnant women. If behavioral counseling alone is insufficient, pharmacotherapy for tobacco dependence, in most cases, poses less risk to the fetus than continued maternal smoking. As with any chronic disease, including asthma, working closely with the patient’s obstetrician is advised. An algorithm for treatment of tobacco dependence in pregnancy is described in “Smoking and Tobacco-Dependence Treatment for Pregnant Women and Women of Childbearing Age”.

Conclusion
In conclusion, the National Black Nurses Association joins the American College of Chest Physicians in their commitment to prevent and address tobacco-dependence. This toolkit provides the clinician an effective program that can be instituted immediately. The purpose of this toolkit is to increase your comfort in providing effective tobacco-dependence management by using evidence-based approaches. It will enable you to appropriately coach your patients to stop smoking successfully and remain tobacco free.
RECOMMENDED 1-HR SELF-TAUGHT SMOKING CESSATION EDUCATION FOR NURSES
http://iml.dartmouth.edu/education/dsr/resources/

Clinical Management of the Patient Who Uses Tobacco
An Interactive Curriculum on Treating Tobacco Use and Dependence

Welcome!
This program is intended primarily for use by instructors in the classroom. These resources can also be used by individuals or small groups of students via the Web, working without an instructor.

The Help section is for technical questions, such as minimum hardware and software requirements, program troubleshooting, as well as background information about this project.

Choose How You Will Use These Resources:
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Development of these educational resources was made possible by an unrestricted educational grant from the Pfizer Medical Education Group, Pfizer Pharmaceuticals.

Respectfully Submitted
Dr. Larider Ruffin, Chair
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