



Nicotine Use Cessation

An Integrated Care Pathway of the
Collaborative Care Network

Subject Matter Expert:

**Joanne H. Ebner, RN,
BSN, OCN, C-TTS**

Pathway Custodian: Andrew
McGlone, MD

Learning Objectives

This CME material was designed to help you to:

- Enhance and optimize nicotine use screening and cessation practices
- Increase knowledge of available resources for nicotine cessation
- Engage CCN people, processes, and tools to enhance patient safety and health outcomes

First, a Friendly Reminder. . .

This Integrated Care Pathway was developed by and for members of the AAMC CCN.

These materials will refer to some resources available only to CCN members and their patients.

Not a CCN member?

We invite you to join the CCN! Please contact the CCN:
aamccollaborativecarenetwork@aaahs.org

These materials reference a Toolkit

- This is provided to you by the CCN.
- It will include larger versions of the Pathway Overview slides, plus screening tools, patient pamphlets, and phone numbers to call when you need help.
- You will see a red TOOLKIT notice in the slides that follow that identify when a corresponding resource is available.

Intended Audience and Scope

Intended Audience for this Pathway

- CCN primary care and specialty clinicians in the ambulatory environment who are screening patients for nicotine use and providing cessation counseling.

Scope of Pathway

- Patients age 18 and up
- Enhancing Provider screening for nicotine use
- Identifying level of nicotine dependence and readiness to quit
- Improving Nicotine Cessation Counseling

In these materials, we will describe:

- Effective screening for nicotine use
- What to do when individuals are ready to quit
- What to do when patients are using nicotine but are not ready to quit
- Available resources to help patients quit
- CCN people, tools, resources, and processes to help you and your patients

Let's Get Started!



Nicotine Dependence is a Chronic Disease!

- Lets be clear about this. Nicotine Dependence is a **chronic disease** that significantly **increases** our population's **morbidity** and **mortality**
- Tobacco smoking is the **leading** cause of **preventable** mortality
- Treating Nicotine Dependence is your **biggest opportunity** to make an **impact** on our **population's health**

Treating Nicotine Dependence

- As with any chronic disease providers have differing levels of interest and confidence in providing treatment and interventions.
- Overwhelmed? Not getting through to some patients?
 - We have you covered with a fast plan to screen patients and connect them to excellent resources.
- Already Performing Nicotine Cessation Counseling, or interested in honing your craft?
 - We have expert advice to help you succeed and get reimbursed for your efforts

Whatever option you choose referral, brief intervention, or extended counseling you as need to tell your patient to quit.

“It is important to your health to quit smoking **now** and I can help you”

Nicotine: What exactly are we up against?

In this pathway when we refer to **Nicotine** we are including the following forms:

- **Tobacco smoking** (cigarettes, pipe, etc.)
- Tobacco products including **Chewing tobacco**, **Snuff** (Fine cut tobacco often called Dip), **Snus** (Rhymes with goose; pasteurized fine cut tobacco made so that saliva produced during use can be swallowed), & **Nasal Snuff** (powder form that can be snorted)
- Inhaled **Nicotine liquid** products: Vaporizers & e-cigarettes including **Juul** (a trendy USB shaped device)

Vaping/e-cigarettes/liquid Nicotine FAQs

How is it different from smoking?

- These devices use a battery to power an atomizer that heats and aerosolizes the liquid in the cartridge. This creates a vapor that emulates but is not tobacco smoke.

Tell me about the Nicotine content?

- It is derived from plants related to the common tobacco plant and sold in liquid form. It is available in concentrations from 6mg/mL to 36mg/mL. Studies have found inconsistencies in actual concentration vs. packaging claims.

Vaping/e-cigarettes/liquid Nicotine FAQ

Are they safe?

- Presently, as of January 2020, there are no data available to effectively determine the safety.
 - No observational data examining the long-term health effects (eg, risk of cancer) of e-cigarettes exist; however, the risk of cancer is likely to be much lower in adults who use e-cigarettes than in those who smoke conventional cigarettes
- The liquid usually also contains **propylene glycol** (food additive listed as “probably safe” by FDA in salad dressings, etc.) or **glycerol** (in toothpaste, etc.). Some products use **ethylene glycol** (anti-freeze). These chemicals do change upon heating but safety is unknown.
- Flavorings increase the chemical content including some with known carcinogenic potential.

Vaping Lung Injury (EVALI)

- In 2019, the Centers for Disease Control and Prevention (CDC) reported over two thousand suspected cases of severe lung illnesses (e-cigarette, or vaping, product use associated lung injury [EVALI]) linked to the use of e-cigarette devices to aerosolize substances for inhalation.
- In the majority of cases, tetrahydrocannabinol (THC) had been inhaled within three months of symptom onset; many patients had also inhaled nicotine, and some patients had inhaled only nicotine.
- Refilled e-cigarette cartridges obtained via informal or illicit sources appear to be associated with EVALI.
- Vitamin E acetate has been detected in bronchoalveolar lavage fluid samples obtained from affected patients, but research is still pending.

Aerosolized liquid Nicotine **Is it safer than smoking ?**

- Again, there are no long term data available to effectively determine health risks including cancer and lung disease.
- There is much debate if these agents have a place as a smoking cessation tool or a safer alternative to patients who cannot stop smoking.
 - The FDA is requiring e-cigarette manufacturers to submit an application to the FDA to demonstrate that their products meet the FDA standard of providing a net public health benefit in regards to smoking cessation.
- Studies show that among adolescents the use of these products increases the likelihood that they will become a tobacco smoker.
- Exposure to vapor has been associated with respiratory irritation and has prompted bans of using these agents in public spaces.

Vaping recommendations

- Presently the negative effects of Vaping including the rise in Adolescent Youth use rates and Vaping Associated Lung Injury make it too risky to recommend as an alternative to smoking cigarettes.
- While it may potentially become a safer alternative to Adult Cigarette use, it is impossible to safely make any recommendations. More research is needed.

Our Pathway starts with Screening for Nicotine Use



Why Screen?

- Remember Tobacco smoking is the **leading** cause of preventable mortality.
- 2/3 of smokers say they want to quit, less than 1/3 seek treatment and even fewer use the most effective treatment.
- Optimization of treatment in smokers can result in up to a 35% abstinence rate at 6 months (vs. up to 6% at 1 year with no treatment).

Who Should get Nicotine Screening and Cessation Counseling ?

United States Preventive Services Task Force is the authority regarding how primary care clinicians should provide preventive care to the general population. Their recommendations are observed by public and private insurance companies as well as organizations that establish standards of care.

USPSTF Grade A* Recommendation:

Screen all adults; including pregnant women.

Adults who are not pregnant	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.	A
Pregnant women	The USPSTF recommends that clinicians ask all pregnant women about tobacco use, advise them to stop using tobacco, and provide behavioral interventions for cessation to pregnant women who use tobacco.	A

*Grade A Recommendation means: “Do this; there’s good evidence it helps people.”

Why Screen? Quality Measure

- Nicotine Screening and Cessation counseling is a frequently a reported Quality Measure and continues to play a role in value-based contracting.
- MIPS Measure #226 Identifies patients 18 years or older who were screened for tobacco use at least once within 24 months AND who received tobacco cessation intervention if identified as a tobacco user.

Overview

Screening for Nicotine Use is Positive

Patient Wants to Quit Smoking

Assess Pack Years

Screen for Lung Cancer if indicated

Refer patient to
AAMC Nicotine
Cessation program
443-481-5366
OR
Maryland Quitline
1-800-QUIT-NOW

Assess: Nicotine Dependence,
Motivation, and Confidence
in Quitting

“It is important to your health
that you quit smoking NOW, I
can help “

- Targeted Smoking Cessation Intervention
- Consider Nicotine Replacement matching level of Dependence
- Consider Cessation Medication

Fast Track

Evaluate Cessation Failure

Consider Medication or
Nicotine Replacement

Follow UP

Give Assistance

Let's started screening.

- If you have not done so already, we recommend implementing a routine screening program with your practice's staff.
- This pathway will use the "5As Model" a universally accepted and tested method for a screening and cessation plan.
- Ask, Advise, Assess, Assist, & Arrange...

TOOLKIT 01: Provider Resource: 5 Major steps toward Intervention/5As

Overview: The “5 A’s” of Nicotine Screening

- **ASK:** Screen **every patient/ every visit**
- **ADVISE:** Strongly urge users to **Quit**
- **ASSESS:** Evaluate Readiness to quit by assessing Motivation, Confidence (in quitting) and level of Nicotine Dependence
- **ASSIST:** Provide aid to help patient quit/ Provide Brief intervention for those not ready
- **ARRANGE:** Create follow up plan a week after proposed quit date. Celebrate success/ Evaluate failures and strategize new solutions

Nicotine Use Screening

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- Start by asking if your patient **Ever** smokes or uses nicotine products.
 - non-daily or intermittent smokers may not identify themselves as smokers when questioned.
- It is important to assess the full scope of nicotine use:
(Cigars, Pipes, E-cigarettes)
 - More than 40 percent of tobacco users consume more than one type of tobacco product

With Smoking History: Try to Assess “Pack Years”

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- Identify age when patient started and total years patient has been smoking
- A pack year is defined as
 - 1 pack per day per year = 1 pack year
- Patients with a 30 pack year history of smoking may be eligible for lung cancer screening. We will review this in detail in a later slide.

Remember to **ASK** about cessation history



- Have you tried to quit before?
- How many attempts have you made?
- What is the longest period of time you have gone without smoking?
- What methods or products have you tried to help you quit?
- What worked, what did not work?

TOOLKIT 02: Patient Resource: My most recent attempt to quit

Advise Smoking Cessation

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- Not every patient counseled in smoking cessation will be prepared to consider quitting.
- However, there is **significant evidence** that **brief clinician advice** and **interventions** to quit at each encounter can **increase smoking abstinence rates**
- We will review interventions for nicotine users not ready or willing to quit in moment.

Give a Clear, Strong and Personalized Message

The logo consists of a teal oval with a dark teal border and the word "ADVISE" in white, uppercase letters centered inside.

- Have a phrase ready to go....
- “It is critical to your health to quit smoking now and I can help you.”
- “As your Clinician, I need you to understand that quitting is the most important action you can take for your health right now and for the future. I can help you.”
- “Your condition *x* is made worse by smoking, it is important you stop now. I can help.”

Assessing Readiness to Quit

ASSESS

There is much debate in the literature regarding whether a stages of change model is more effective than a non-stage-based intervention such as proactively offering patient treatment to quit. Clinical reviews have found the models to be relatively equivalent. Whatever you choose, we recommend always assessing Motivation, Confidence and Nicotine Dependence

Stage of Change Model

- Pre-contemplative
 - Not thinking of quitting
- Contemplative
 - Seriously thinking of quitting
- Preparation
 - Building plan to quit
- Action
 - Putting quit plan into action
- Maintenance

VS

Direct Intervention

Nicotine use is a Chronic disease

Quitting is the treatment

“I recommend you quit”

“Quitting can be hard but treatment is available, I can help you.”

TOOLKIT 03: Provider Resource: States of change

Assess Readiness to Quit



Using a motivation/confidence scale can give you a quick benchmark to guide cessation intervention.

How seriously would you rate your motivation to quit smoking on a scale of 1 to 10 (with 1 being no motivation and 10 is *extremely* motivated)

1 2 3 4 5 6 7 8 9 10

Rate your level of confidence that you can quit smoking on a scale of 1 to 10 (with 1 being no self confidence and 10 indicating *I know I can do it!*)

1 2 3 4 5 6 7 8 9 10

TOOLKIT 04: Provider Resource: Nicotine Assessment

Assess Readiness to Quit

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- Plan an intervention for patients with low motivation scores.
- Consider cessation counseling for patients with high motivation but poor confidence.
- A highly motivated and confident Patient may still need help. Be sure to also assess level of Nicotine Dependence

Assess Nicotine Dependence

ASSESS

The Fagerstrom Tolerance Test is an excellent resource to gauge level of nicotine dependence.

How dependent are you on Nicotine?

Do you ever wake up at night to have a cigarette?	Yes	No
How soon after you wake up do you use tobacco? (Circle)		
	<i>Within 5 minutes</i>	<i>3 points</i>
	<i>6 to 30 min.</i>	<i>2 points</i>
Do you find it difficult to refrain from smoking in places where it is forbidden?		
	<i>Yes</i>	<i>1 point</i>
	<i>No</i>	<i>0</i>
Which cigarette would be the most difficult to give up?		
	<i>First one in the morning</i>	<i>1 point</i>
	<i>All others</i>	<i>0</i>
How many cigarettes per day do you smoke?		
	<i>10 or less</i>	<i>0</i>
	<i>11 to 20</i>	<i>1 point</i>
	<i>21 to 30</i>	<i>2 points</i>
	<i>31 or more</i>	<i>3 points</i>
Do you smoke more frequently during the first hours after waking than during the rest of the day?		
	<i>Yes</i>	<i>1 point</i>
	<i>No</i>	<i>0</i>
Do you smoke if you are so ill that you are in bed for most of the day?		
	<i>Yes</i>	<i>1 point</i>
	<i>No</i>	<i>0</i>

TOOLKIT 04: Provider Resource: Nicotine Assessment

Scoring the Fagerstrom Tolerance Test

ASSESS

Use level of dependence to assess patient need for nicotine replacement to avoid nicotine withdraw syndrome

Fagerström Tolerance Test Score (Add points and circle):

0-2 very low dependence 3-4 low dependence 5 medium dependence

6-7 high dependence

8-10 very high dependence

Assessment: Patient is not ready to quit or not interested in quitting

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- Remember here is where a brief intervention is important and has been shown to be effective.
 - This may be the most statistically valuable impact you make on population health today!
- Most experts recommend a Motivational Interviewing Intervention.
- Motivational interviewing aims to build intrinsic motivation to change and to resolve ambivalence about change, and to contrast where a patient is with where a patient wants to be (eg, smoke-free).

TOOLKIT 05: Provider Resource: Motivational Interviewing

Intervention: Motivational Interviewing

The logo consists of a teal oval with a gradient, containing the word "ASSIST" in white, uppercase, sans-serif font.

- Clinicians can use motivational interviewing techniques to explore a smoker's feelings, beliefs, ideas, and values regarding tobacco use
- Motivational Interviewing uses open-ended questions, affirmations, expression of empathy, reflective listening, and summary statements of what the patient has said.
- Asking a smoker what he or she likes and does not like about smoking is a great way to start.
- A personalized message concerning a smoking-related health problem can motivate patients into taking action.

Intervention: Patients not ready to quit

The logo consists of a teal oval with a gradient, containing the word "ASSIST" in white, uppercase, sans-serif font.

- The 5 Rs are commonly used in the Motivational Interviewing technique for patients who use Nicotine products.
- **Relevance:** Why is quitting personally relevant to the patient, being as specific as possible?
- **Risks:** Ask the patient to identify the negative consequences of smoking.
- **Rewards:** Ask the patient to identify the benefits of cessation. Highlight the benefit most personally relevant to them .
- **Roadblocks:** Ask patients to identify barriers and note solutions to them.
- **Repetition:** Repeat this at all visits, remind patients that it can take multiple attempts to be successful.

TOOLKIT 06: Provider Resource: Intervention /5Rs

Reimbursement for Cessation Counseling

- **99406/G0436** – Allowable \$15.60 - Smoking and tobacco cessation counseling visit for the asymptomatic patient; intermediate, greater than 3 minutes, up to 10 minutes
- **99407/G0437** – Allowable \$30.13 - Smoking and tobacco cessation counseling visit for the asymptomatic patient; intensive, greater than 10 minutes
- Typically associated diagnosis code: **F17.210**- Cigarette Nicotine dependence without complication.
- Frequency: Two cessation attempts per year; each attempt may include a maximum of 4 intermediate or intensive sessions, with the total annual benefit covering up to 8 sessions per year.

Assessment: Patient is ready to quit!



- Meta-analyses of clinical trials have found that behavioral counseling and pharmacotherapy each have strong evidence of efficacy for smoking cessation. The combination of the two methods produces the best results.
- Most studies demonstrate increasing quit rates with increasing level of behavioral support.

Assessment: Patient is ready to quit!

A teal oval button with the word "ASSESS" in white capital letters.

- If you have a patient ready to quit it is important to give them all the tools at your disposal so that they can be successful.
- We **recommend** you consider using pharmacotherapy on non-pregnant patients when appropriate and strongly recommend behavioral support programs.
- We **recommend** you use nicotine replacement with patients with high level of nicotine dependence.

Help Patient make a plan to quit

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- Select a quit date and write down reasons they are quitting.
TOOLKIT 07: Patient Resource: Plan checklist
- Tell them to let friends and family know they will be quitting and will need support.
- Strategize and anticipate challenges and triggers they will face when quitting.
- Identify and propose solutions to these challenges. Example:
 - I smoke whenever I get in my car: Remove all tobacco from car/remove lighter/replace with gum

TOOLKIT 15: Patient Resource The 3 A's Avoid, Alter, Alternative!

Nicotine Withdrawal Syndrome

- Nicotine causes physical dependence and tolerance.
- Patients are likely to experience cravings and withdrawal symptoms including: [TOOLKIT 08: Withdrawal Symptoms Information Sheet](#)
 - increased appetite and weight gain, changes in mood (dysphoria or depression), insomnia, irritability, anxiety, difficulty concentrating, and restlessness [TOOLKIT 09: Tips for Keeping the weight off](#)
- Symptoms peak in the first three days of smoking cessation and subside over the next three to four weeks. [TOOLKIT 10: Week 1 Tips](#)



Medication/Nicotine Replacement Treatment (NRT) for non-pregnant Patients

Nicotine Replacement

- Gum
- Lozenge
- Nasal Spray
- Transdermal Patch
- Oral Inhaler

Medication

- Bupropion (Zyban)
- Varenicline (Chantix)

TOOLKIT 11: Know your options handout for patients and providers

TOOLKIT 14: For Patients: How does Nicotine effect the body?

Can I use Nicotine Replacement and Smoking Cessation medication together?

- **YES! Use your Clinical Judgment.**
- Nicotine replacement is commonly used with zyban.
- When using Long Acting Nicotine products like the Nicotine Patch, short acting products Like the Nicotine Gum/Lozanges can be used on an as needed basis
- Though less commonly recommended, there are data that show promise to Nicotine Replacement and Chantix (varenicline). In a randomized trial of 435 smokers, treatment with varenicline and nicotine patch for 12 weeks resulted in a higher rate of continuous abstinence compared with varenicline and placebo patch (49 versus 33 percent) six months after the treatment ended.

Dosing Nicotine Replacement Therapy

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- Failing to control nicotine withdrawal will reduce cessation rates
- Many patients are under dosed on Nicotine Replacement Therapy (NRT)
- Use AAMC Nicotine Replacement Algorithm as a guide to help you choose the appropriate NRT for your patient's needs.

TOOLKIT 12: AAMC Nicotine Replacement algorithm

Example from AAMC NRT Algorithm

≥40 cigarettes/day = 42 mg/day Nicotine Replacement	
<input type="checkbox"/> Nicotine Patch 21 mg	Dose: 42 mg. Apply 2 x 21 mg patches
<input type="checkbox"/> Nicotine Polacrilex (Gum) 4 mg	Dose: 4 mg 1 piece every 1-2 hours as needed for nicotine cravings, withdrawal symptoms,, urges to use tobacco occur or when desired upon 30 minutes of wakening; no more than 20 pieces per day.
<input type="checkbox"/> Nicotine Polacrilex (Lozenge) 4 mg	Place the Lozenge in mouth, allow to slowly dissolve. Minimize swallowing. Do NOT chew or swallow lozenge. Occasionally move lozenge from one cheek to the other side until completely dissolved (about 20-30 minutes). Do NOT eat or drink 15 minutes before using or while the lozenge is in the mouth. Do not use more than 5 lozenges in 6 hours; no more than 20 lozenges per day.

TOOLKIT 12: AAMC Nicotine Replacement algorithm

Oral/Transdermal Nicotine safety

- Data on the health consequences of chronic nicotine exposure alone in the absence of cigarette smoking are available from studies of chronic users of nicotine replacement products.
- This data **does not** suggest that chronic nicotine exposure from these methods increases long-term cardiopulmonary or cancer risk.
- Nicotine use is **not considered safe** in pregnancy.

Give patients the resources they need

The logo consists of a teal oval with a gradient and a drop shadow, containing the word "ASSIST" in white, uppercase, sans-serif font.

AAMC Tobacco Cessation Program

Group and Individual Cessation Programs

443-481-5366

Free sessions and access to free NRT for patients

Maryland Health Department: (Great Online resources)

<https://www.myquitkit.org/>

Maryland Quitline

4 free telephone sessions and possible free NRT

1-800-QUIT-NOW (1-800-784-8669)

<http://smokingstopshere.com/>

Nicotine Anonymous

(Local meetings in Arnold, Baltimore and Columbia)

1-877-879-6422

TOOLKIT 13: Smoking cessation resources

Epic users can now refer directly to the Maryland Quitline!

The screenshot shows a web-based form titled "Ambulatory Referral to Maryland Quitline". At the top right, there are "Accept" and "Cancel" buttons. The form contains several sections: "Patient consented for this Referral?" with "Yes" and "No" buttons and an empty text box; "Patient Contact Phone # with dashes (XXX-XXX-XXXX)" with a text input field and a "Comments" label; "Best Day/Time to Reach" with "Morning", "Afternoon", and "Evening" buttons and an empty text box; "Patient Preferred Language" with "English", "Spanish", "Chinese (Mandarin)", and "Other" buttons and an empty text box; and a "Comments:" section with a rich text editor containing the text: "We've referred you to Maryland Quitline for tobacco cessation, please be aware that you will receive a call from an unfamiliar number within 24-48 hours to complete your enrollment in Maryland Quitline." At the bottom right, there are "Accept" and "Cancel" buttons.

These referrals go directly to the MD Quitline, who will contact the patient. You will receive updates in your Epic Inbasket. Be sure to completed the prompt asking for the best contact phone # for the patient.

Arrange for follow-up with Patient

A teal oval button with a dark teal border and a slight gradient, containing the word "ARRANGE" in white, uppercase, sans-serif font.

Follow-up should be scheduled within a week of the patient's quit date to provide reinforcement, monitor for adverse or side effects of pharmacotherapy, and monitor response to smoking cessation therapy.

Follow up: Relapse Prevention

The logo consists of a teal oval with a dark teal border and the word "ARRANGE" in white, uppercase letters centered inside.

- Studies estimate that 22 percent of smokers relapse within three months.
- 35 to 40 percent of patients relapse between years 1 and 5 after quitting.
- Relapse is common. Review and identify source of relapse and consider medications and increased level of behavioral therapy.

TOOLKIT 02: My Most Recent Attempt to Quit worksheet

Lung Cancer Screening

- The USPSTF gives lung cancer screening a grade B* recommendation.
- The 2011 National lung screening Trial concluded that Low Dose CT (LDCT) was more effective than chest xray.
- Starting in 2015 the LDCT was covered by Medicare.

*The USPSTF recommends the service. There is high certainty that the net benefit is moderate or there is moderate certainty that the net benefit is moderate to substantial.

Lung Cancer Screening Criteria

- Patients qualify for Lung Cancer screening if they meet the following criteria:
 - Age 55-80
 - Currently smoke or quit in the past 15 year
 - 30 pack year history
- For More Information on AAMCs Lung Cancer screening program (started in 2012) call **443-481-5838**

If You're Not Sure the Patient Will Follow Through with Your Referral to These Resources. . .

- Call One Call Care Management and let them know that this patient may need extra help making and keeping an appointment with smoking cessation counseling.
- Their phone number: 443 481 5652

How Did We Do in Helping You Achieve These Learning Objectives?

This CME material was designed to help you to:

- Streamline screening for and addressing nicotine use
- Engage CCN people, processes, and tools to enhance patient safety and health outcomes

Let us know by taking the post-test, which will allow you to receive free CME credit.

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