

## Best Practices to Improve Tobacco Cessation Success

Tobacco use is changing as new forms of tobacco and new delivery devices gain notoriety. Electronic cigarettes (e-cigarettes) and other tobacco products such as cigarillos, hookahs (or water pipes) and smokeless tobacco are replacing cigarettes as the primary drivers of tobacco use and tobacco exposure for youth and adolescents. The ultimate endgame of ending tobacco use and nicotine addiction is unchanged, but the evidence-based tobacco control strategies and best practices are adapting to meet the challenges of new generations of tobacco products and tobacco users.

Cigarette smoking and other forms of tobacco use have been recognized as health risks for decades. Tobacco remains the leading preventable cause of morbidity and mortality in the United States and worldwide. The prevalence of smoking continues to decline among both men and women in the U.S., but about 14 percent of U.S. adults, more than 30 million individuals, still smoked in 2017. Cigarette smoking alone will claim about 480,000 premature deaths this year alone.

The health picture is grimmer still among adolescents. The 2011 to 2018 National Youth Tobacco Survey found that use of electronic cigarettes by high school students rose by 78 percent from 2017 to 2018 to nearly 21 percent or 3.1 million students. The next most popular tobacco products among high school students were cigars (7.7 percent), cigarettes (7.6 percent), smokeless tobacco (5.5 percent), hookah (3.3 percent), pipe tobacco (0.8 percent) and Bidis (0.7 percent).

e-Cigarettes have become the most popular tobacco product among adolescents in the U.S. Based on existing evidence that nearly 90 percent of tobacco users first try a tobacco product by 18 years of age and adolescent experimentation with tobacco, even on an infrequent basis, is associated with established adult tobacco usage, the growing use of noncombustible tobacco products by adolescents is setting the stage to cause the transition to the use of other tobacco products.

Cigarettes remain the most dangerous form of tobacco to both users and those exposed to the second and third hand effects of tobacco. Some electronic cigarettes, may deliver less nicotine and other toxic compounds per inhalation than conventional cigarettes while at least one manufacturer, JUUL, delivers more nicotine per inhalation than some electronic and conventional cigarettes.

E-cigarette use is soaring, especially by adolescents and young adults, while conventional combustible cigarette use continues to decline. It is also important to note that a single e-cigarette refill container, called a pod by at least one manufacturer, can contain as much nicotine as a pack of 20 conventional cigarettes.

Because e-cigarettes are relatively new, there is less completed research into the short and long term health effects of use, but initial human data as well as longer term animal data show health harms linked to e-cigarette use or exposure. Regardless of industry claims and tobacco user beliefs about the relative safety of different delivery devices, there is no evidence that the use of e-cigarettes or any other form of tobacco is safe.

ENDS come in many shapes, sizes and names. They may look like traditional cigarettes, cigars, pipes, flashlights, flash drives, pens or almost any other shape that manufacturers and marketers believe may appeal to potential users. All contain three basic components, a battery, a vaporizer and a cartridge often containing a flavored solution and nicotine that is inhaled by the user.<sup>(9)</sup> The solution is usually flavored, often appealing to children, and contains nicotine. A single cartridge may contain as much nicotine as an entire pack of combustible cigarettes.

E-cigarettes and other non-smoking forms of tobacco may not be covered by regulations or laws that explicitly ban tobacco smoking (1, pg 7). A 2017 survey published in the British Medical Journal found that just 16.7 percent of accredited, degree-granting colleges and universities institution in the U.S. had 100 percent smoke-free or tobacco-free protections on campus (10).

The U.S. Public Health Service published the most widely used tobacco cessation algorithm in 2008. The evidence-based Clinical Practice Guideline for Treatment of Tobacco Use and Dependence, (Am J Prev Med. 2008 Aug; 35(2): 158–176. doi: 10.1016/j.amepre.2008.04.009, table2, cannot access) commonly referred to as the “5 As,” outlines five basic steps:

- Ask every patient about tobacco use
- Advise every tobacco user to quit
- Assess the patient’s willingness and readiness for a quit attempt
- Assist patients with a plan to quit using tobacco
- Arrange follow up appointments or referral to tobacco cessation specialist support as needed

The American College of Cardiology updated the USPHS algorithm based on current tobacco use patterns and delivery products. The 2018 ACC Expert Consensus Decision Pathway on Tobacco Cessation Treatment follows a similar five-step format using the latest evidence-based tobacco use assessment and treatment methods. The ECDP is an opt-out (i.e., option to refuse treatment) approach that provides practical clinical guidelines that can be used in both outpatient and inpatient settings to screen patients for tobacco use, help motivate patients to quit and help guide both providers and patients to the most effective treatment options

Current best practices in tobacco cessation recognize important changes in tobacco use, tobacco delivery and tobacco cessation treatment over the past decade.

- While cigarette smoking remains the most dangerous form of tobacco use and the most common form of tobacco used by adults, newer delivery systems such as electronic cigarettes (e-cigarettes) and other devices are more widely used by adolescents and young adults. Programs that ask about “smoking” miss tobacco users who are experimenting with or have become nicotine-dependent from non-combustible delivery systems.
- Tobacco cessation intervention is standard of care for all tobacco users, not an optional approach.
- Multiple pharmacologic agents have been approved by the Food and Drug Administration to treat nicotine dependence, including five nicotine replacement therapy (NRT) agents as well as varenicline and bupropion.
- Behavioral therapy can significantly improve the likelihood of success in quitting tobacco. Useful behavioral skills training includes cognitive behavioral therapy, motivational interviewing, mindfulness and financial incentives to motivate and reinforce behavioral change.
- Combination treatment can be more effective than any single agent. Combining NRT with varenicline or bupropion is more effective than either medication alone. Combining pharmacotherapy with behavioral therapy is more effective than either approach on its own. Current clinical guidance does not recommend medications for adolescent tobacco cessation because of a lack of high-quality studies.
- Reimbursement for tobacco cessation is widely available. The Patient Protection and Affordable Care Act, often shortened to the Affordable Care Act or ACA, requires coverage for smoking cessation. Medicare and Medicaid plans also cover smoking cessation. Cost should not be a barrier to quitting tobacco.
- Exposure to secondhand smoke (SHS) is an acknowledged risk. Health and safety regulations have made many bars, restaurants, offices, schools, shopping malls, transit vehicles and other public spaces smoke-free, but residences, private vehicles and other private spaces are largely unregulated. Spouses, children, other family members, visitors and household workers may still be exposed to toxic tobacco smoke.
- Third hand smoke (THS), the residual nicotine and other combustion products that cling to clothing, carpeting, flooring, furniture, ventilation and heating/air conditioning systems and other surfaces, can be an important contributor to respiratory and other disease in children and other vulnerable individuals. E-cigarettes and other noncombustion delivery devices produce aerosolized mixtures that contain nicotine and other dangerous substances, but research is still lacking to quantify the precise risks of second and third hand exposures.



# Tobacco Cessation

## Making Health System-Wide and Practice-Wide Changes that Succeed

Quitting tobacco is more than quitting smoking. Tobacco use comes in multiple forms, from traditional cigarettes, cigars and pipes to vaping, e-cigarettes, water pipe (hookah) smoking, chewing tobacco, snuff (dry powder), snus (moist powder) and more. Tobacco smoke contains more than 7,000 chemical compounds, many of which can interfere with the immune system, and contribute to disease. No form of tobacco has been shown to be safe for human consumption.

### Use the 5 Major Steps to establishing an Intervention, the 5A's. Every Patient, Every Encounter

1. **Ask** - Identify and document tobacco use status for every patient
2. **Advise** - Urge every tobacco user to quit in a clear, strong and personalized manner
3. **Assess** - Is the tobacco user willing to make a quit attempt now?
4. **Assist** - For the patient who is willing to try to quit, set up counseling and pharmacotherapy
5. **Arrange** - Schedule follow-up contact, in person, by phone, email or text, preferable within 7 days of the quit date

1

**Gather Information and actively screen for tobacco use and exposure in any form. Determine the percentage of patients entering the system, institution or practice who have used tobacco or have been exposed to tobacco use within the past year or other appropriate timeframe**

- Admission sheets
- Face-to-face contacts over a 2 - 4 week period
- Mine computerized admission and intake forms
- Incorporate tobacco use and exposure into all medical, nursing and other histories
- Integrate tobacco use and exposure into standing admission and screening orders and protocols

2

**Expect all healthcare professionals, nurses, pharmacists, therapists, students, interns, residents, hospitalists, specialists, and others, to intervene regardless of their practice. Treat tobacco use as a vital sign.**

- Ask about tobacco use and exposure appropriately
- Incorporate motivational interviewing and the 5Rs tool with all tobacco users
- Determine the need and appropriateness for pharmacologic therapy, refer as needed
- Document, document, document (tracking form, progress notes)

3

**Train all physicians and other providers to respond**

- Ask about tobacco use appropriately
- Offer strong, credible and consistent messages about quitting tobacco
- Determine the need for pharmacotherapy and prescribe as appropriate
- Document, document, document (tracking form, progress notes)

4

**Institute a system to offer self-help materials and behavioral counseling**

- Standardize all patient education materials
- Utilize the existing IT infrastructure for tobacco messaging and video education
- Determine who can be trained to evaluate the need for behavioral counseling, i.e. volunteers, medical students, chaplains, nurses, psychologists, pharmacists
- Determine who can be trained to provide behavioral counseling

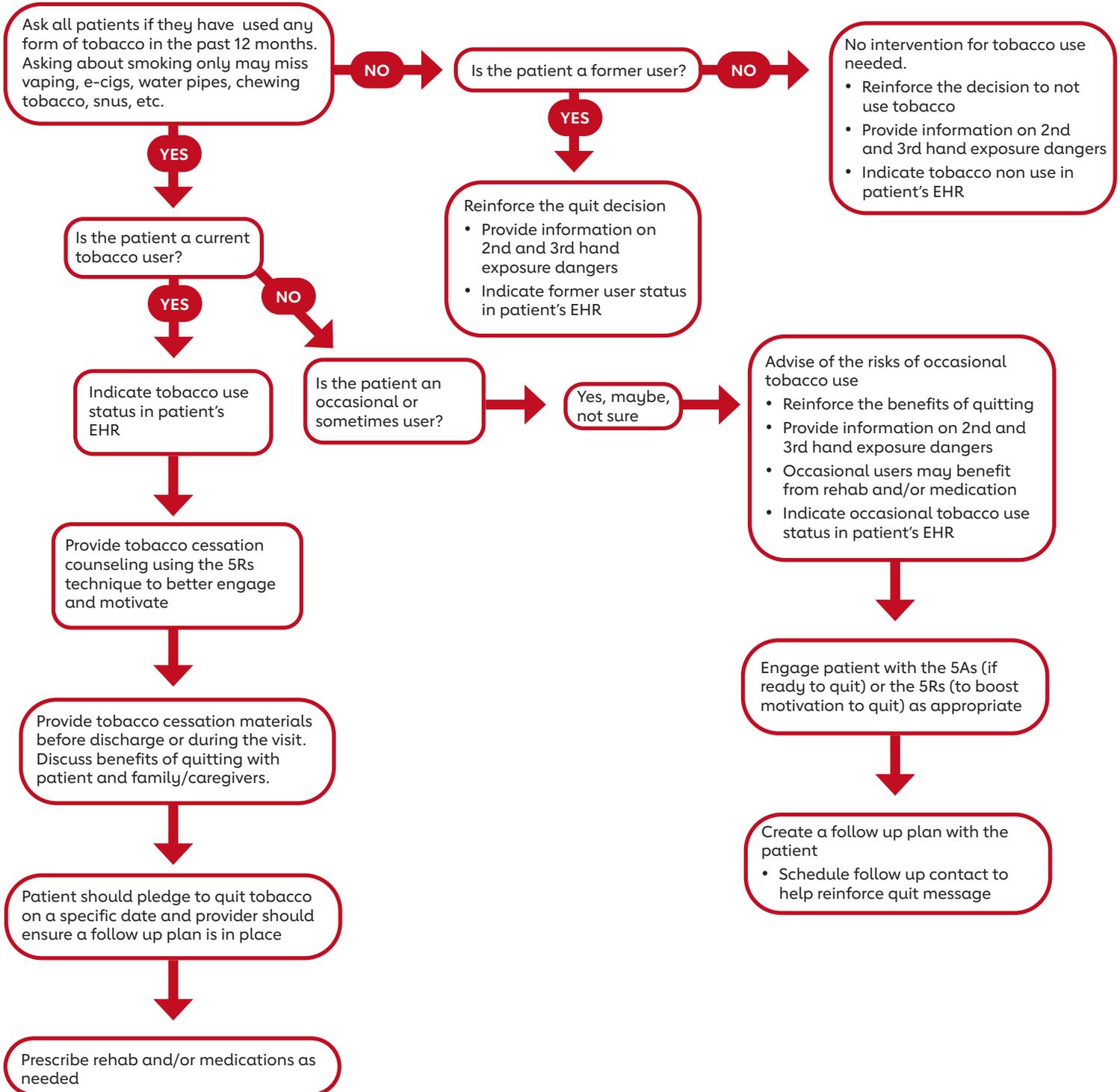
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**Create a mechanism for follow-up**

- Use tobacco interventionists for patient follow-up
- Use electronic contact by health care professionals already contacting patients
- Integrate contacts within the local public health system
- Use a centralized contact system for all tobacco users within the community
- Document, document, document

# Tobacco Cessation Counseling Process

(Can be adopted for both inpatient and outpatient use)



# Tobacco Cessation Script

## For Patients READY to Quit

Utilize the 5 Major Steps to Intervention: the 5A's

The 5A's intervention is an evidence-based best practice to help individuals who are ready to stop using tobacco reinforce their motivation to quit and reach their goal. The intervention is intended to be brief, five minutes or less. While originally designed for primary care, it can be used by providers in almost any healthcare setting. For patients who are not ready to quit, the 5R's intervention can help improve their motivation to stop using tobacco.

### Ask

every patient about tobacco use

### Advise

every tobacco user to quit. Different forms of tobacco, cigarettes, cigars, pipes, chewing tobacco, snus, vaping, e-cigarettes, water pipes, etc, present different health risks, but no form of tobacco use has been shown to be safe

### Assess

the patient's willingness and readiness for a quit attempt

- Question 1, would you like to be a non tobacco user?  
Patients who answer question 1 with a "no" or "not sure" are NOT ready to quit. The 5R's intervention can help them better understand the dangers of tobacco use and boost their motivation to quit.
- Question 2, do you think you have a chance of quitting successfully?  
Patients who answer question 2 with a "yes" or "not sure" are READY to quit. Continue to the Assist and Arrange steps.

### Assist

patients with a plan to quit using tobacco

- Help develop a quit plan with a firm date
- Provide practical counseling and advice on quitting
- Provide informational and educational materials on quit lines, websites, social media and other practical resources
- Recommend nicotine replacement products and/or pharmacologic agents as appropriate

### Arrange

follow up appointments or a referral to tobacco cessation specialist support as needed

***Nicotine is one of the most powerfully addictive substances of abuse, either legal or illegal.***



# Tobacco Cessation Script

## For Patients NOT Ready to Quit

Motivational Interview, AKA the 5R's

The 5R's is a motivational interview tool that helps patients to express motivations for quitting tobacco in their own words. It also gives providers the opportunity to tailor their responses to meet the patient's specific needs and objections and boost motivation to finally quit. For patients who are clearly ready to quit tobacco use, the 5A's intervention can help them stop using tobacco.

### **R**elelevance

Ask the patient why quitting tobacco is relevant. May include the patient's own health, family health, cost of tobacco use, quality of life, etc

### **R**isk

Ask the patient to identify negative consequences of tobacco use such as short and long term effects on personal health, family health, economics, quality of life

- Acute Risks: shortness of breath, chest discomfort, increased risk of respiratory infection, harm to pregnancy, erectile dysfunction, infertility
- Long Term Risks: Myocardial Infarction (heart attack), stroke, lung and other cancers (larynx, oral cavity, pharynx, Esophagus, and others), COPD, osteoporosis, long term disability, need for extended care

### **R**ewards

Ask the patient to identify the benefits of stopping tobacco use

- Improved health, food will taste better, improved sense of smell, financial savings, healthier family and children, better performance in physical activities, improved appearance (reduced wrinkling/ ageing of skin, whiter teeth), reduced cancer risks

### **R**oadblocks

Ask the patient to identify potential barriers or impediments to quitting

- Fear of failure, nicotine withdrawal symptoms, weight gain, lack of social support, depression, missing enjoyment of tobacco, being around other tobacco users, limited knowledge of effective and affordable treatment options

### **R**epetition

Repeat the intervention at EVERY visit in every healthcare setting

- Tobacco users who have filed previous attempts to quit can be reminded that many people make multiple attempts before they are successful

***Most tobacco users make several attempts before they succeed in quitting for good.***

## Focus on Any Tobacco Use and Quit Help Programs Improves Cessation Results

Two-thirds of US adults who use tobacco want to quit and just over half actually make the attempt every year. But trying to quit cold turkey, all at once, without help, is tough. Only 4% to 7% of tobacco users manage to quit on their own. The key to improving tobacco cessation rates is to make it easy to get help. Counseling and behavioral interventions can help, medication can help, and combined behavioral and medical interventions were found to be more effective than any single intervention. For Rush Copley Medical Center in Aurora, Illinois, the first step in helping patients quit tobacco is knowing who is using it.

Rush Copley staff realized several years ago that conventional smoking cessation programs were missing an important population of tobacco users, those who did not smoke cigarettes, said Deborah Brunelle, RN, team member of the Rush Copley Tobacco Oversight Committee, a subcommittee of Rush University Medical Center Tobacco Oversight Team. The harmful effects of tobacco and its constituent products, including nicotine, the primary addictive component, varies by method of use, Brunelle noted, but there is no evidence that the use of tobacco in any form is safe.

Tobacco cessation is one of the most challenging tasks in any medical institution or practice. The health harms of smoking and other forms of tobacco use have been well known and documented for more than 50 years.

Years of consistent smoking cessation messages have gotten the message across. When asked about smoking, the majority of stroke patients at Rush Copley Medical Center said they had quit.

At the same time, a number of stroke patients and staff were asking to take an e-cigarette break, Brunelle said. A handful of older patients continued to smoke cigarettes, but younger patients in their 50s, 60s and 70s, had switched to electronic cigarettes. "They think they are safer because they don't smoke, but they're not," Brunelle said. "They didn't quit smoking, they just switched to a different type of tobacco with a different profile of harms. We had done such a good job with the message that smoking cigarettes is bad that we had missed the larger message, that using tobacco in any form is bad. We needed to expand the question 'Do you smoke?' to 'Do you use any kind of tobacco product? Do you vape or use JUUL?' Even some of our nursing staff had failed to realize that tobacco is harmful no matter the form. It's hard to fault patients who believed the ads that e-cigarettes or some other form of tobacco is safe when some of our nurses thought that by switching from cigarettes to some other form of tobacco, they were avoiding the harms of smoking. A lot of them are shocked to learn that switching to a different tobacco product isn't going to make them any healthier."

The Tobacco Oversight Committee started small with new tobacco educational materials for nursing staff. The new materials discussed the growing variety of different tobacco products that are currently available, cigarettes, cigars, cigarillos, pipes, snuff, snus, chewing tobacco, e-cigarettes and other vape products, heat-not-burn devices, and their different health and environmental effects. Each tobacco product and device carries a distinctive risk profile for a variety of harms including lung cancer, esophageal cancers, cancers of the oral cavity and other parts of the body, tooth loss and other effects. Some forms of tobacco also create harmful environmental residues that are the functional equivalents of second-hand and third-hand smoke.

The next step was to revise the existing intake and screening tools that focused on cigarette smoking to include any form of tobacco use. Patient feedback revealed a hidden barrier to tobacco cessation, family members who use tobacco. “Patients told me ‘The education and support you gave me to help me quit was wonderful, but I’m coming home to a household full of smokers,’” Brunelle explained. “‘So why should I quit? How can I quit when I’m surrounded by smokers?’” Patient screening now includes questions about tobacco use by family and household members, and their willingness to support the patient in quitting tobacco. Educational materials regarding tobacco cessation also includes the entire household, not just the patient being admitted.

The current intake process screens all patients for tobacco status, from current user to former user, to never user. Never users are congratulated on their choice to forego tobacco. Former users are congratulated on their decision to quit—and asked for more detail on when they stopped and how successful their quit experience has been. Relapse rates are highest during the first one to two weeks after quitting tobacco, but relapse is always possible, especially during times of stress, such as a health emergency or hospital admission.

Rush Copley routines automatically set up cessation interventions for current tobacco users, starting with a referral to the Illinois state I Quit telephone help line. Every hospital unit has binders with tobacco cessation materials and tobacco cessation interventions have become standard of care for all patients on all units. Tobacco cessation intervention has been transformed from an optional “add-on” to care into an “opt-out” activity that patients must specifically decline. Most patients are receptive. “Tobacco oversight is house-wide,” Brunelle said. “Some of our surgeons are no longer scheduling patients for elective and non-urgent surgery until they commit to quitting tobacco. Quitting tobacco is about universal screening, staff education, patient and family education, using every opportunity to intervene and expanding our outreach to the community.”

For more information about GWTG and how to become involved, contact your local American Heart Association Quality Improvement Initiatives Representative or log on to [www.americanheart.org/getwiththeguidelines](http://www.americanheart.org/getwiththeguidelines).