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A Comprehensive Approach to Increase Adult Tobacco Cessation

Brenna VanFrank, MD, MSPH^a, Letitia Presley-Cantrell, PhD^a

^aOffice on Smoking and Health, National Center for Chronic Disease Prevention and Health Promotion, Centers for Disease Control and Prevention

Quitting smoking is one of the most important changes individuals can make to improve their health. The U.S. Surgeon General concluded in 2020 that smoking cessation reduces the risk for all-cause mortality, cardiovascular diseases, chronic obstructive pulmonary disease, adverse reproductive health outcomes, and twelve types of cancer.¹ Although considerable progress has been made in the U.S. in reducing smoking over the past half century, there is still work to be done: it is estimated that 34 million U.S. adults smoke cigarettes,² more than 480,000 die annually from smoking or tobacco smoke exposure, and more than 16 million are living with a smoking-related illness.³

When it comes to addressing the smoking epidemic, what works is well known: evidence-based interventions at the individual, health system, and population levels have been scientifically shown to prevent and reduce smoking.^{1,3} Yet, while significant gains have been made by the public health community in advancing prevention strategies, cessation remains a challenge. In a nationally representative survey of 33,672 adults, 68.0% of those who currently smoked reported wanting to quit and 55.4% reported trying to do so.¹ However, only 31.2% of adults who smoked used evidence-based treatment when trying to quit, and only 7.4% successfully quit smoking in a given year.¹ The situation is compounded by marked disparities that persist in both smoking prevalence and cessation-related measures across population groups.¹

As a nation, the U.S. can do better, but it will take a comprehensive, interdisciplinary approach. One key opportunity is for the public health and health care sectors to join forces to reduce the significant burden of tobacco related morbidity and mortality. The mobilization of the healthcare sector is critical given that tobacco dependence is a chronic, relapsing substance use disorder that often requires multiple interventions and long-term support for successful recovery.^{4,5}

In this issue of JAMA, the U.S. Preventive Services Task Force (USPSTF) has updated its recommendations⁶ and supporting evidence review⁷ on the screening and treatment of tobacco use and has reaffirmed the importance of clinician action in the prevention of tobacco-related disease. The USPSTF has issued an A recommendation for screening for

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tobacco use and delivery of advice to quit for all adults, including pregnant persons.⁶ USPSTF has further recommended that clinicians provide behavioral interventions and US Food and Drug Administration (FDA)-approved medications to non-pregnant adults to aid in quitting (A recommendation).⁶ These recommendations are consistent with those of the U.S. Surgeon General, who has concluded that a combination of behavioral counseling and FDA-approved medication can increase an individual's likelihood of successfully quitting.¹

For pregnant persons who use tobacco, the USPSTF has issued an A recommendation to provide behavioral interventions to aid in tobacco cessation.⁶ Pharmacotherapy for pregnant persons remains an I statement given that the evidence for the balance of benefit to harm for these interventions remains insufficient with few studies available.⁶

Behavioral counseling and FDA-approved pharmacotherapy are also the mainstay in clinical practice guidelines.^{5,8} However, despite these prominent endorsements of efficacy and safety, less than 5% of U.S. adults who try to quit smoking use this combination of treatments.¹

While screening and treatment have been, and continue to be, essential to the clinical prevention of tobacco-related disease, the evidence for cessation therapies has continued to evolve. Evidence-based behavioral interventions now include individual and group counseling, telephone counseling such as that received through state quitlines (1-800-QUIT-NOW), and web- and text-based interventions.¹ Approaches to pharmacotherapies have also evolved. For example, combining long- and short-acting nicotine replacement therapies has been found to be more effective than single forms of nicotine replacement therapy, and pre-loading (i.e., starting medication in advance of a quit attempt) with nicotine patch, may also increase successful cessation.¹ Available evidence related to electronic cigarettes (e-cigarettes) as a potential cessation tool has increased as well. Although it remains uncertain whether e-cigarettes, in general, can help people quit smoking, some research suggests that use of certain e-cigarettes containing nicotine or using them more frequently is associated with greater smoking cessation.¹ However, the long-term health effects of e-cigarette use remain largely unknown,⁹ and the USPSTF has issued an I statement for insufficient evidence regarding the use of e-cigarettes for cessation.⁶ No e-cigarette has been approved by the FDA as a cessation aid.

In treating tobacco use and dependence, primary care clinicians should not be expected to do the work alone. It is well-established that cigarette smoking harms nearly every organ system and adversely affects a wide range of clinical outcomes.³ Ensuring individuals are provided with and connected to evidence-based treatment and support to quit is the responsibility of every care team in every specialty and in every setting, including ambulatory, inpatient, and behavioral health care.

Systems-level changes can make it easier for clinicians to give their patients the treatment they need. For example, team-based approaches to care, including chronic disease management models, can mitigate the burden of screening and treatment delivery on any one individual.⁵ Integrating screening and treatment into policies and clinical processes can help clinicians effectively deliver treatment, and establishing clinical protocols can routinize

intervention.⁵ Additionally, extending treatment with cessation services like quitlines, web, and text interventions,¹ and through community-based health professionals such as pharmacists¹⁰ and community health workers,¹¹ has potential to extend the reach and effectiveness of clinical interventions. Furthermore, delivery of clinical interventions can also be increased with the linkage of payment to cessation-related quality measures and the availability and dissemination of clinical practice guidelines.¹ Healthcare professionals and systems can approach these types of system-level changes through clinical quality improvement processes.¹² Such efforts can be enhanced when health systems work in partnership with public health entities (e.g., state tobacco control programs) with experience integrating tobacco screening and treatment into care settings.¹³

In addition to treatment delivery and systems-based supports, healthcare professionals and systems can also support population-level strategies that not only increase smoking cessation, but also prevent tobacco use initiation. The evidence-base is well established for such population-level strategies, including tobacco price increases, smoke-free policies, mass-media tobacco education campaigns, and access to cessation treatments.^{1,3} In particular, enhanced access to and utilization of cessation treatments can be accomplished, in part, by the provision of insurance coverage that comprehensively covers all evidence-based therapies, is barrier-free (e.g., no treatment limits or prior authorizations), and is promoted to both enrollees and clinicians.¹ Health systems can support these population-level strategies and engage in proven tobacco control policy efforts by leveraging their own community health needs assessments and implementation plans.¹⁴ Additionally, healthcare systems and the public health community can partner on community health improvement plans¹⁵ to engage in multi-sector approaches to facilitate these population-level strategies.

Helping people recover from tobacco use and dependence requires the partnership of the public health community and healthcare professionals from all specialties and across disciplines to deliver comprehensive support through interventions at individual, system, and population levels. It is important that every patient is systematically and routinely screened for tobacco use, that everyone who uses tobacco has access to—and is provided with—quality, evidence-based cessation treatment, and that all people are provided the community and environmental supports they need to stay tobacco-free. These efforts must be applied comprehensively and equitably across our communities to ensure that no one is left behind. Moving forward together, health care and public health can comprehensively support tobacco cessation and achieve greater health for all.

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