




## PERSPECTIVE

# Bridging the Gap in Tobacco Cessation Services: Utilizing Community Pharmacists to Facilitate Transitions of Care in the USA

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Interprofessional strategies for promoting tobacco cessation lead to enhanced quit rates among patients; however, current approaches might not effectively support patients with their quit attempts after they are discharged from the hospital. This paper explores opportunities for interprofessional collaboration between health system-based providers and community pharmacists, as one proposed approach to bridging tobacco cessation services during transitions of care. Suggested strategies include (1) increasing other healthcare professionals' awareness of legislative advances that permit pharmacists to prescribe cessation medications in some states, and (2) encouraging bidirectional communication between health system-based and community-based providers, especially via integrated electronic health records. Community pharmacists can offer a convenient solution to obtain the post-discharge medication and counseling support that patients need to increase their chances of quitting for good. Additional steps are discussed to improve broadscale capacity of this service being provided in community pharmacies.

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## INTRODUCTION

Tobacco use remains a leading preventable cause of morbidity and mortality in the USA,<sup>1</sup> with an estimated 14.0% of adults reporting current smoking in 2019.<sup>2</sup> While most adults who smoke indicate that they would like to quit, less than half received advice from a provider to quit smoking in the previous year.<sup>3,4</sup> Provider-reported barriers to the delivery of and referral to cessation services are numerous, including insufficient time to address tobacco cessation, inadequate training and self-efficacy for providing tobacco dependence treatment,<sup>5,6</sup> and lack of staff time.<sup>7,8</sup> Furthermore, providers indicate that they lack the necessary resources and information for identifying appropriate services to refer their patients.<sup>6,7</sup> From the patient perspective, potential barriers include long waits

for appointments with a primary care provider to receive a prescription for a quit-smoking medication (e.g., an average of 29.3 days to see a family medicine physician),<sup>9</sup> distance needed to travel to access a provider, and limited availability of physician appointments outside of typical working hours.<sup>10</sup>

Medical events, such as hospitalizations, provide opportune moments for healthcare providers to address patient tobacco use and connect patients to appropriate services.<sup>11,12</sup> Furthermore, evidence from a meta-analysis suggests that cessation counseling interventions that initiate during hospitalization and provide support for 1 month or longer post-discharge increase cessation rates by 37% at 6- to 12-month follow-up.<sup>12</sup> While promising, major challenges exist for hospitals to identify feasible models to support patient cessation after they leave the hospital setting.<sup>12</sup>

## ENHANCING ACCESS TO TREATMENT FOR TOBACCO USE AND DEPENDENCE

In 2017, the U.S. Centers for Medicare & Medicaid Services released an informational bulletin encouraging states to “facilitate easier access to medically necessary and time-sensitive drugs for Medicaid beneficiaries,”<sup>13</sup> including smoking cessation medications. Because more than 90% of Americans live within two miles of a community retail pharmacy,<sup>14</sup> and most of these locations are open evenings and weekends, provision of tobacco cessation services in community pharmacies can provide patients with enhanced access to tobacco dependence treatment. Perhaps most importantly, the ability to walk into a pharmacy without an appointment allows individuals to initiate action the moment they make a personal commitment to quit—a moment that might pass if they must wait for an appointment with other healthcare professionals.

In 2004, New Mexico became the first state in which pharmacists were granted authority to prescribe all FDA-approved tobacco cessation medications. Longitudinal evaluation of these interventions revealed that the majority of prescriptions were written for nicotine replacement therapy (38.4%) or varenicline (30.7%).<sup>15</sup> Furthermore, more than one-third of patients assisted were non-white, and 53.4% had no health insurance,<sup>15</sup> suggesting that pharmacists can reach underserved populations that commonly exhibit a high prevalence of tobacco use.<sup>2</sup>

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Because few individuals are successful when quitting, and fewer than one-third who attempt to quit smoking use evidence-based cessation methods,<sup>16</sup> pharmacists who can prescribe medications for quitting and provide behavioral counseling can play an important role in enhancing patients' odds of success. In fact, studies show that the quit rates achieved when pharmacists prescribe cessation medications and provide counseling are similar to or higher than rates achieved by other healthcare professionals.<sup>1,15,17–21</sup>

Currently, 15 states now permit pharmacists to prescribe some or all the medications for tobacco cessation (see Table 1), and several other states have statutes or legislation at various stages in the approval process. Through funding from the National Cancer Institute, a suite of training programs has been launched for pharmacists, pharmacy preceptors, pharmacy technicians, and pharmacy students, to support national capacity building for provision of pharmacy-based tobacco cessation services. These trainings address the selection and prescribing of medications along with implementation of associated behavioral counseling.

### TRANSITIONS OF CARE: INTERPROFESSIONAL APPROACHES TO TREATING TOBACCO USE AND DEPENDENCE

Collaboration between health systems and community pharmacies could achieve two beneficial goals that address tobacco use and treatment: (a) reducing demands on other healthcare professionals' time, and (b) enhancing patient's access to evidence-based tobacco cessation treatment, which combines behavioral counseling with FDA-approved medication(s). Pharmacists could support bridging transitions of care between health systems and the community. Past research has demonstrated that collaborations between nurses and community pharmacists are associated with improved patient outcomes,<sup>22</sup> and referrals of patients from an outpatient orthopedic clinic to community pharmacists for tobacco cessation

resulted in significantly greater prevalence of tobacco abstinence.<sup>23</sup> This type of collaborative referral process can be translated to a variety of practice settings, with integration into physicians' offices, ambulatory care clinics, and the discharge planning process of hospitals and other health systems. Including community pharmacists in the patient care continuum with a focus on tobacco cessation services increases opportunities to advise and assist patients to quit and creates opportunities for enhanced interprofessional patient care. An example of how community pharmacists can bridge gaps in transitions of care may be found in Figure 1.

### HOW TO FOSTER AN INTERPROFESSIONAL APPROACH TO TOBACCO CESSATION DURING TRANSITIONS OF CARE

Nurse case managers support continuity of health care services by bridging services received during hospitalization and discharge to the community, ensuring recommendations from hospitalization are continued after discharge.<sup>24</sup> Many patients make a commitment to quitting tobacco when hospitalized but without support may resume smoking at home.<sup>25</sup> One way that nurse case managers can address the gap between smoking cessation efforts in the hospital and support for maintaining cessation at home is through a referral to community-based pharmacy support. However, to achieve greater collaboration between nurses working in hospitals and community pharmacists, a greater awareness of existing resources is essential. To assist patients and other providers in identifying pharmacies that are providing tobacco cessation services, the [www.QuitSmokingPharmacies.com](http://www.QuitSmokingPharmacies.com) website was developed and recently launched (May 2021). This resource includes a locator map designating participating pharmacies and a brief description of what the patient can expect when enrolled in a formal pharmacy-based tobacco cessation program. Other clinicians and health systems are also encouraged to access the web-site, to identify referral locations for their patients who are ready to

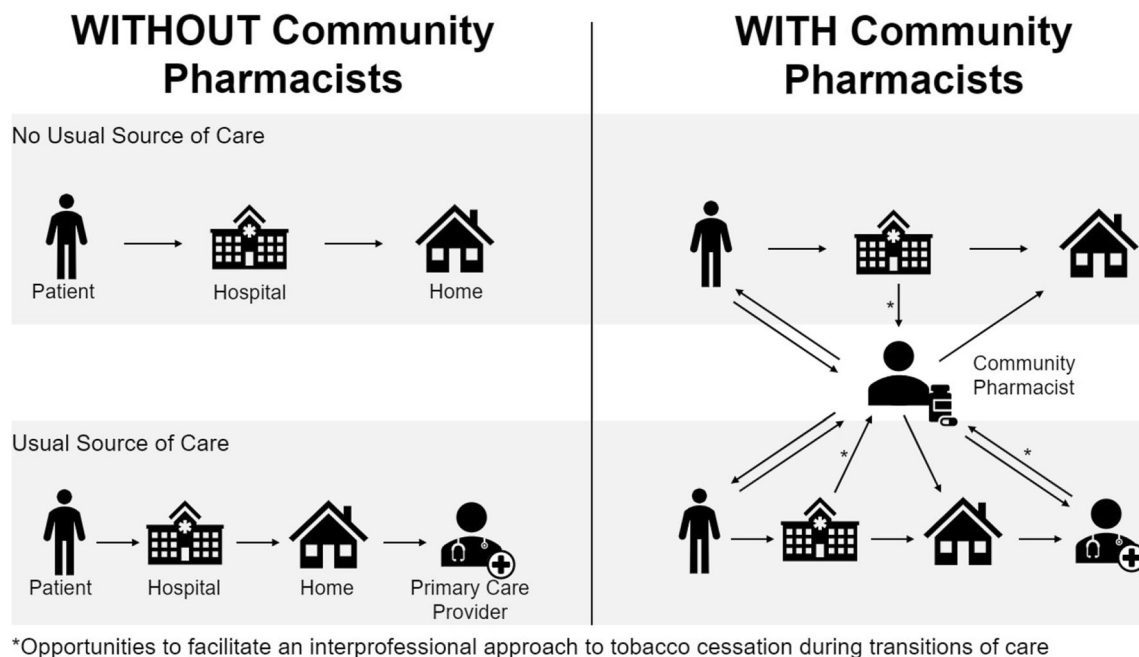
Table 1 States with Prescriptive Authority for Cessation Medications (April 2021)

State	Non-prescription nicotine medications*	Prescription nicotine medications†	Varenicline and bupropion SR‡	Prescribing implemented
Arizona	✓	✓	✓	2017
Arkansas	✓	✓		2020
California	✓	✓		2016
Colorado	✓	✓	✓	2017
Idaho	✓	✓	✓	2017
Indiana	✓	✓	✓	2019
Iowa	✓	✓		2020
Maine	✓			2017
Missouri	✓	✓		2019
Minnesota	✓	✓		2020
New Mexico	✓	✓	✓	2004
Oregon	✓	✓	✓	2020
Vermont	✓	✓	✓	2021
West Virginia	✓	✓		2019

\*Nicotine transdermal patch, gum, and lozenge

†Nicotine nasal spray and inhaler

‡Sustained-release (the only bupropion formulation with an FDA indication for smoking cessation)



**Figure 1 Including community pharmacists in tobacco cessation services during transitions of care.**

quit. Community pharmacists providing tobacco cessation services may also want to reach out to local hospital systems to raise awareness and discuss potential ways to streamline referrals between the two facilities.

### OPPORTUNITIES TO IMPROVE PHARMACISTS' ABILITY TO SUPPORT TOBACCO CESSATION

**Inclusion of Varenicline and Bupropion.** Not all states that allow pharmacists to prescribe cessation medications include varenicline (the most effective medication for quitting)<sup>26</sup> and bupropion, which might limit the success of interventions. However, the two most recent states to pass legislation allowing pharmacists to prescribe (Vermont and North Dakota) include all FDA-approved tobacco cessation medications in the protocol.<sup>27,28</sup> Including all medications, not just nicotine replacement medications, is a priority going forward as additional states consider implementing policies allowing pharmacists to prescribe cessation medications.

**Staffing and Workload.** Community pharmacists are facing unprecedented workloads and staffing shortages exacerbated by the COVID-19 pandemic,<sup>29,30</sup> which complicates service provision. However, shortages in community pharmacies may largely be due to the COVID-19 pandemic and therefore temporary. An oversupply of licensed pharmacists exists.<sup>31</sup> Additionally, as reimbursement declines for traditional pharmacy services, such as prescription dispensing, pharmacists are looking to use their expertise to provide other services,<sup>32</sup> which may include tobacco cessation.

**Payment.** Payment is critical for sustaining any service, including pharmacist-provided tobacco cessation services. The Affordable Care Act requires Medicaid, Medicare, and private insurance companies to reimburse providers for provision of FDA-approved tobacco cessation medications.<sup>33</sup> However, pharmacists in most states are not eligible for payment through Medicaid, because they are not considered providers. Pharmacist eligibility for reimbursement through private insurance currently is also rare. Lack of payment is a significant, but not insurmountable, barrier. Specifically, this barrier could be overcome either by granting pharmacists provider status, or by explicitly including payment requirements in state-level policies allowing pharmacists to prescribe tobacco cessation medications. The approach of including payment in state-specific policies has been used for other pharmacist-provided services—for example, Oregon requires payment for pharmacists' time spent performing assessments and providing patient care associated with prescribing hormonal contraceptives.<sup>34</sup> Similar to other healthcare settings, uninsured patients would be responsible for the cost of pharmacist-provided tobacco cessation services unless funding is provided.

**Access.** Access to evidence-based tobacco cessation resources is needed for all areas and all patient populations. Although expansion of payment for some pharmacist-provided services may be limited to underserved areas, there is a need for quality tobacco cessation services for all patients.<sup>13</sup>

**Bi-directional Communication Between Healthcare Providers.** To support an interprofessional approach to tobacco cessation service provision, bi-directional communication must occur between patients' healthcare providers across all settings, including community pharmacy. For

example, discharge instructions regarding tobacco cessation must be shared with the patient's community pharmacist, and community pharmacists must notify patients' healthcare team of any interventions that are implemented.<sup>35</sup> Although integrated electronic health records can enhance patient safety and support pharmacist-provided services,<sup>36</sup> most community pharmacists report a general lack of electronic health record integration, and this is a barrier to providing transition of care services.<sup>37</sup> Additionally, the diversity in the information systems across healthcare and pharmacy settings further impedes this type of bi-directional communication.

Pharmacy engagement in Health Information Exchange (HIE), which allows participating providers to securely access and share information across systems, could be an effective method to support bi-directional communication to enhance care coordination.<sup>38,39</sup> While promising, as pharmacists are not universally recognized as providers, they may not be eligible to participate in HIEs in all states. Alternatively, use of interoperable standards, such as the Pharmacist eCare Plan,<sup>40</sup> "allows for exchange of information between providers of care to optimize medication-related decision support and patient adherence to medication regimens both within a healthcare setting and when a patient moves between healthcare settings."<sup>41</sup> Importantly, each of these methods of bi-directional data sharing can address a variety of complex use cases, including tobacco cessation.<sup>39,41</sup>

## CONCLUSION

Community pharmacists offer one feasible solution to address gaps in tobacco cessation services during transitions of care as patients move from the hospital and into the community. Increasing awareness of community pharmacists' capabilities for providing tobacco cessation services, encouraging collaboration, and sharing of relevant patient information across healthcare settings can enhance interprofessional approaches to continuity of care for patients and ultimately increase patient's odds of successfully quitting tobacco.

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### Declarations:

**Conflict of Interest:** None of the authors have any conflicts of interest to declare.

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