

**State University Partnership Research Brief**  
**Behavioral Health Tobacco Dependence Treatment for Kentucky Medicaid Recipients**

**Partner University:** University of Kentucky  
**College/School:** College of Nursing  
**Principal Investigator:** Chizimuzo Okoli, PhD, MPH, MSN, RN, CTTS

**What is Known on This Topic?**

Despite broad declines in tobacco use, rates among persons with mental illness remains high. Individuals with mental illness consume a large portion of *all* tobacco products sold in the US - often leading to premature death in this population. Tobacco treatment interventions and preventions geared at decreasing use and risks for these individuals are critical.

**What Did this Project Do?**

This study adds to the evidence of tobacco prevention and intervention efforts for Medicaid-enrolled adults with mental illness by piloting a smoking cessation intervention to determine its feasibility. This study also assessed the current practices used in community mental health settings related to treatment for tobacco use.

**What Could Medicaid Do with These Conclusions?**

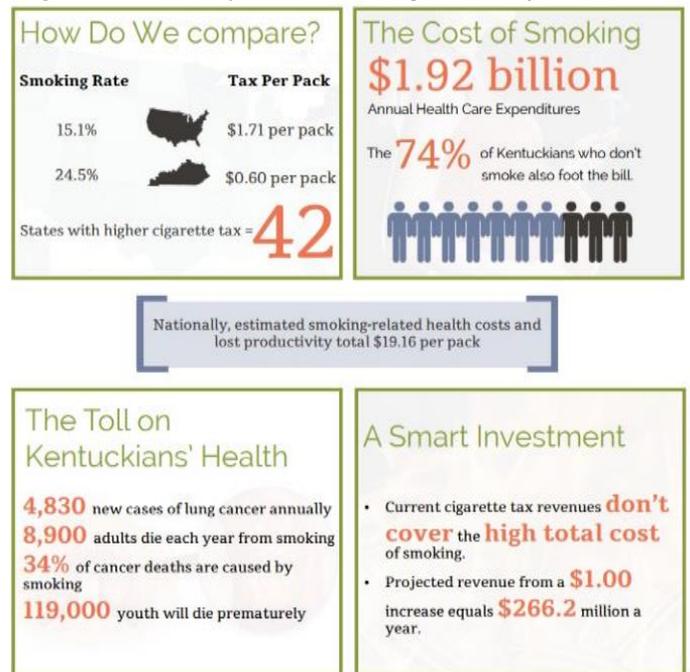
Insights on tobacco treatment (specialized training, tailored interventions, policy, billing, and community resources) for adults receiving treatment at community mental health centers are discussed.

**Introduction**

Tobacco use in the US has steadily declined over the past 5 decades.<sup>1</sup> Despite this decline, tobacco use among persons with mental illness remains high. The Centers for Disease Control & Prevention estimates that individuals with mental illness consume four out of each ten (41%) tobacco products sold in the US, with use being particularly high amongst adults with serious mental illnesses (e.g., schizophrenia). Even more alarming, tobacco users with mental illness die approximately 25 years earlier than adults in the general US population - due largely to smoking-related chronic diseases (e.g., heart and lung disease, cancer, etc).<sup>2</sup> Chronic diseases are the leading causes of disability and mortality; and one of the main contributors to high healthcare costs in America. In Kentucky, almost 9,000 deaths annually are linked to smoking – more than alcohol, AIDS, car accidents, illegal drugs,

murders, and suicides combined.<sup>3</sup> Smoking is implicated in one third (34%) of all cancer cases in the Commonwealth; Kentucky leads the country in lung cancer deaths.<sup>3</sup> Every year in Kentucky, nearly 2 billion dollars are spent on healthcare costs associated with smoking (see Figure 1).<sup>3</sup> Medicaid absorbs a large portion of these costs. Because Medicaid plans provide health coverage for a significant portion of Kentucky adults with psychiatric diagnoses, advances in tobacco treatment and prevention efforts population would constitute a meaningful benefit to the operations of the Department for Medicaid Services.

**Figure 1: The Cost of Tobacco Smoking to Kentucky**



**Source:** Foundation for a Healthy Kentucky (n.d.). Retrieved from <https://www.healthy-ky.org/newsroom/news-releases/article/124/infographic-the-high-cost-of-smoking-in-kentucky>

**Project Methods and Results**

The goal of this study was to assess, train, and evaluate the provision of tobacco treatment in behavioral healthcare settings. Towards this goal, the study had multiple components; it: (1) assessed CMHC providers' capacity to deliver tobacco treatment services; (2) provided educational webinars; (3) delivered tobacco treatment specialist training sessions, and; (4) piloted a behavioral "quit and win" (Quit/Win) smoking cessation contest among CMHC patients. A discussion of project methods and results associated with each study component is provided on the following page.

## State University Partnership Research Brief Behavioral Health Tobacco Dependence Treatment for Kentucky Medicaid Recipients

### *Aim 1: Assessment of CMHC Tobacco Interventions*

Staff from 14 CMHCs, serving all 120 Kentucky counties, were administered a tobacco treatment survey assessing both practice and policy. Of the 159 respondents, few reported that their organization had a written policy restricting tobacco use, and even fewer confirmed that their facility provided tobacco treatment services to clients – particularly evidence-based tobacco treatments using recommended clinical guidelines (e.g., 5A's Approach). Only 13.8% of Medicaid adult recipients were diagnosed with nicotine dependency, despite a known prevalence of 40-60% in similar clientele using some form of tobacco product. Respondents expressed interest in training on tobacco-free policy, specialized training, and community referral resources for their clients. Figure 2 reports additional findings of this survey.

**Figure 2:** Findings from CMHC'S Provider Policy Survey

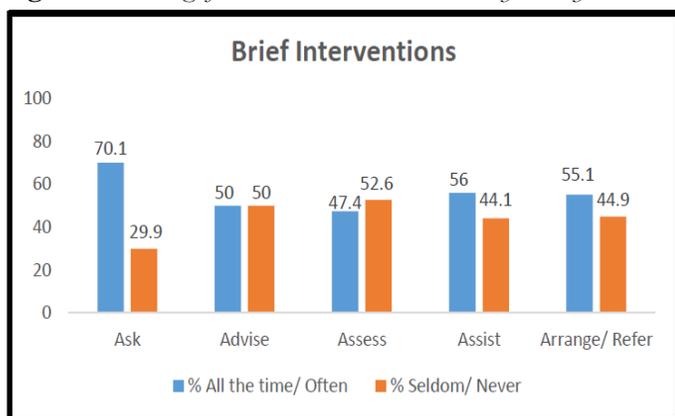


Figure 2 describes the results of a survey of CMHC supervisors, front-line staff, and healthcare providers (159 total respondents). In terms of the 5A's, providers report consistently asking their clients if they use tobacco, but much less frequently following up with strategies to help them quit.

### *Aim 2: Training & Webinars on Evidence-Based Treatment*

To enhance provider capacity for delivering evidence-based tobacco treatment interventions, two webinars were conducted on the delivery of proven interventions and one behavioral health training for all CMHCs providers. Prior to these webinars, a 1-hour forum on Screening, Brief Intervention, and Referral for Treatment (SBIRT) was offered. Additionally, a half-day training on SBIRT strategies and motivational intervening was offered to help CMHC staff improve their clinical skills related to enhancing their client's internal desire to make health behavior changes.

### *Aim 3: Tobacco Specialist Training Sessions*

Two CMHC providers were selected for their interest and readiness to provide tobacco treatment and support to complete the Tobacco Treatment Specialized Training course offered by the UK College of Nursing BREATHE program.

### *Aim 4: Quit/Win Tobacco Free Contest*

A systematic review of relevant Quit/Win literature was completed. The study reviewed nine Randomized Controlled Trials (RCTs) and cohort studies. These studies found the quit rates ranged from 9.5% to 92.8%, with follow-up rates averaging 10.4% and 69.4% respectively. However, the studies did not assess participants mental health status. Therefore, a pilot study using a control group design was conducted at a CMHC to determine feasibility of Quit/Win Tobacco Free contests among adults with mental illness. Participants who reported current tobacco use (minimum 10 cigarettes daily and carbon monoxide levels  $\geq 6$ ) were recruited. Those in the control group received a pamphlet, while the intervention group also received brief motivational counseling. Seven individuals were enrolled in the contest, of which four were eligible to participate in the drawing following 30 days, and one successfully quit. The coronavirus outbreak in Kentucky interrupted the full implementation of this project.

### Conclusions & Health Policy Implications for Medicaid

Practice and policy strategies needed to effectively reduce tobacco use disparities and risks for adults with mental illness must: (1) provide specialized tobacco treatment training to Medicaid providers; (2) increase the number of tobacco treatment specialists; (3) implement tobacco-free policy, and (4) increase the number of community behavioral health partners supporting tobacco-free services for clients, and; (5) offer community resources. Supporting and increasing the capacity of coverage for behavioral health programs and CMHC's ability to bill separately for tobacco treatment services (apart from bundling it with mental health services) is necessary given the health consequences of tobacco use. These efforts are critical in addressing disparate rates of tobacco use and related burden for adults with mental illness statewide. Efforts can help reduce the annual disease burden and Medicaid costs for this vulnerable group.

### References

- 1Wang, T. W., Asman, K., Gentzke, A. S., Cullen, K. A., Holder-Hayes, E., Reyes-Guzman, C., Jamal, A., Neff, L., & King, B. A. (2018). Tobacco Product Use Among Adults — United States, 2017. *MMWR. Morbidity and Mortality Weekly Report*, 67(44), 1225–1232. <https://doi.org/10.15585/mmwr.mm6744a2>
- 2Prochaska, J. J. (2011). Smoking and Mental Illness — Breaking the Link. *New England Journal of Medicine*, 365(3), 196–198. <https://doi.org/10.1056/NEJMp1105248>
- 3Foundation for a Healthy Kentucky (n.d.). Infographic: The High Cost of Smoking in Kentucky. Retrieved from <https://www.healthy-ky.org/newsroom/news-releases/article/124/infographic-the-high-cost-of-smoking-in-kentucky>