Integrating Diversity, Equity, and Inclusion Approaches Into Treatment of Commercial Tobacco Use for Optimal Cancer Care Delivery

The Cancer Center Cessation Initiative Diversity, Equity, and Inclusion Working Group*

ABSTRACT

Tobacco-related cancer incidence and mortality and commercial tobacco use have decreased steadily in recent decades, but improvements have not been equitably experienced across population subgroups. A complex interaction across socioecological domains of individual, interpersonal, community/organization, and societal/policy factors influence disparities in tobacco use, treatment, and related health outcomes. NCI's Cancer Center Cessation Initiative (C3I) provides an ideal platform to examine and intervene on multilevel influences across the cancer control continuum to reduce any disproportionate tobacco-related burden and eliminate tobacco-related disparities. The C3I Diversity, Equity, and Inclusion (DEI) Working Group encourages cancer centers to develop, evaluate, and adopt evidence-based practices regarding DEI for prevention and treatment of commercial tobacco use across the cancer control continuum. This paper highlights how 3 C3I sites intervene to address socioecological influences on tobacco use among racially, ethnically, socioeconomically, and geographically diverse patient subgroups. It then outlines ways in which DEI considerations could be integrated into research with patients with cancer who use tobacco and practices related to standards of cancer care. Incorporating DEI considerations in the pursuit of optimal tobacco treatment could facilitate elimination of inequities in population-level cancer outcomes, spanning the full continuum of cancer care from prevention to survivorship.

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Background

Nearly one-third of all cancer-related deaths are attributable to commercial tobacco use. Improvements in tobacco-related cancer incidence, mortality and tobacco cessation, however, have not been equitably experienced across all population subgroups.[1] In particular, Black/African Americans, individuals of low socioeconomic status, and those living in rural areas experience a disproportionate burden of tobacco-related cancer incidence and mortality.[1] Black/African Americans and Native Hawaiians also have a higher smoking-associated risk for lung cancer than other racial/ethnic groups.[2] Additionally, other racial and ethnic minoritized groups, sexual and gender minorities, and people with behavioral health and/or comorbid substance use conditions are more likely to be exposed to tobacco marketing and price promotions, and are less likely to receive advice to quit tobacco and use pharmacotherapy.[3] A complex interaction across socioecological domains of individual, interpersonal, community/organizational, and societal/policy factors influence these disparities in tobacco use and treatment, and ultimately within cancer care.[4–6]

The Cancer Center Cessation Initiative (C3I), which was launched in 2017, includes 52 NCI-designated Cancer Centers that work to integrate high-quality tobacco treatment into routine cancer care.[7] Although NCI has previously funded tobacco-related disparities research in community networks,[8] C3I is integrated into the cancer center infrastructure, thereby providing an ideal platform to examine and intervene on multilevel influences across the entire cancer control continuum, from prevention to palliation.[9] Thoughtful design and implementation of tobacco treatment that prioritizes and integrates diversity, equity, and inclusivity (DEI)[6,10] is critical if C3I programs are to reduce cancer disparities at the population level.

Members from 22 C3I sites comprise the current DEI workgroup, whose mission is to encourage cancer centers to develop, evaluate, and adopt evidenced-based practices with regard to DEI for the prevention and treatment of commercial tobacco use across the cancer control continuum. Here, we showcase how 3 C3I sites integrate DEI efforts into tobacco treatment at multiple socioecological levels of influence. We then propose ways in which cancer centers could embed

*A complete list of the collaborators in the Cancer Center Cessation Initiative Diversity, Equity, and Inclusion Working Group appears at the end of this article.

DEI considerations into patient-oriented tobacco-related research and practice implementation.

Fred Hutchinson Cancer Research Center

Seattle Cancer Care Alliance (SCCA) is the primary site for patient care at the Fred Hutchinson Comprehensive Cancer Center. SCCA serves people from all over Washington State and beyond, but community-based efforts focus on King, Pierce, and Snohomish counties, where 52% of SCCA's patient population and 3.7 million people reside. SCCA's Living Tobacco Free Services Program, established in 2008, includes counseling by certified tobacco treatment specialists (TTSs), pharmacotherapy, and referral to external resources like a quitline. Patients are followed in various ways, tailored to patient preferences (eg, calls with a TTS, written resources, and free download and support for the Quit2Heal smartphone app). In 2019, a community health needs assessment found 4 major cancer-related health needs: (1) cancer prevention and screening, (2) culturally and linguistically appropriate outreach, (3) access to care, and (4) Indigenous health.

Simultaneously, in 2019, SCCA launched *həli?il* (*haa lee (?) eel*, Coast Salish for "become well/heal"), an Indigenous-specific Health Promotion program. həli?il engages the Indigenous community in cancer care and provides treatment for commercial, nonceremonial tobacco cessation. The program supports a tribal liaison, a patient navigator specifically for Indigenous populations, a community health worker, and a medical director. The program applies culturally and linguistically appropriate methods to provide outreach, patient navigation, and advocacy. The program team is conducting focus groups and interviews with American Indian/Alaska Native community members to elucidate facilitators and barriers to nonceremonial tobacco cessation and lung cancer screening. As the program matures, SCCA plans to expand its reach by facilitating health fairs, powwows and other community gatherings, and offering routine training to SCCA staff and providers to build capacity and responsiveness to patients who identify as Indigenous.

University of Maryland Greenebaum Comprehensive Cancer Center

University of Maryland Greenebaum Comprehensive Cancer Center (UMGCCC) serves a catchment area of 5.4 million people living in Baltimore City plus a 10-county region in central Maryland. Baltimore City has a predominately Black/African American population (62%), with a sizeable percentage of Black/African American residents in the UMGCCC 10-county catchment area as well (32%). In 2020, the UMGCCC Community Outreach and Engagement leadership organized a Tobacco Taskforce for key stakeholders to strategize on tobacco and cancer. The resultant UMGCCC tobacco treatment program places patients at the center and builds options around their preferences and needs, including virtual or in-person visits with a certified TTS, SmokefreeTXT text messaging support, free nicotine replacement therapy samples, lung cancer screening enrollment, and a closed-loop referral to the Maryland Quitline. The program also resulted in treatment of tobacco use as the "fifth" vital sign and facilitated the electronic referral process for tobacco treatment.

To increase patient reach, tobacco cessation advice is provided at multiple touchpoints throughout the patients' care by staff who act as patient navigators. Using a DEI lens, when possible, patients are paired with patient navigators of the same race and/or language. Additionally, in response to patients' described preferences during focus groups, the UMGCCC team created patient education and communication media that is inclusive of patients and providers of different genders and skin tones. Community members and patients will provide input into these materials to bolster acceptance, reach, and engagement with the final products, and improve cessation among traditionally underrepresented patient groups.

University of California Davis Comprehensive Cancer Center

The University of California Davis Comprehensive Cancer Center's (UCDCCC's) catchment area of 19 inland northern California counties (42% rural) is home to 5 million people who comprise a diverse majority-minority population (particularly Latinx, Asian American, Native Hawaiian, and Pacific Islander) with nearly 30% speaking a non-English language at home. The UCDCCC Stop Tobacco Program was established in 2017, housed under UCDCCC's Office of Community Outreach and Engagement and in partnership with the health system's TTS in Health Management and Education.[11] UCDCCC partners with local county tobacco control coalitions, conducts tobacco treatment trainings for safety-net clinics that serve diverse populations (eg, Asian American, Native American), and hosts community tobacco education events that include partners serving sexual and gender minority and rural populations.

UCDCCC community outreach and education has been the basis for supporting policy change at the local and state level. UCDCCC member, Dr. David Cooke, and Dr. Phil Gardiner, Co-Chair of the African American Tobacco Control Leadership Council, described in a local op-ed how menthol cigarettes were cheaper in a local predominantly African American neighborhood,[12] demonstrating a community-level variable that put African Americans at a disadvantage. In a 2019 educational roundtable forum hosted by UCDCCC, academic and community partners discussed key issues related to flavored tobacco products, and a subsequent resource document[13] was shared with local policymakers. The City of

Table 1. Considerations for Future DEI-Related Research and Practice/Implementation Strategies by Socioecological Level of Influence

	Research Questions	Practice/Implementation Strategies
Individual	**Investigators** • In population-based or cohort studies, examine catchment-specific barriers and facilitators to tobacco treatment reach and engagement (eg, spoken language, literacy level, poverty rate) • In clinical trials, reconsider a "one-size-fits-all" approach to outcome evaluation and examine patient characteristics with considerations for disparities and equity	**Clinicians** • Assess use of multiple tobacco products (with and without menthol or other flavorings) and presence of other tobacco users in the home as standard of care • Assess feelings of discrimination and co-occurring chronic stress and their role in tobacco use and cessation • Be mindful of historical medical trauma and its impact on provider and patient level barriers to tobacco treatment engagement or cessation **Administrators** • Determine whether geographic or regional barriers exist for telehealth access due to possible internet and broadband shortages, or sociocultural reasons. Consider uniquely addressing any potential barriers or inequities
Interpersonal	**Investigators** • Investigate the impact of a community-engaged tobacco treatment program on effectiveness outcomes • Test the added value of community health workers or community educators as tobacco treatment specialists for reach once patients with cancer leave the cancer center and return home. Does this differ by subpopulations?	**Clinicians** • Be aware of personal biases and seek consultation and training to address any biases or knowledge gaps, as appropriate • Adopt culturally tailored tobacco cessation materials that show diverse representation and identities, including culturally tailored constructs and language **Administrators** • Hire people from the catchment area as tobacco treatment specialists • Repeatedly train staff responsible for tobacco use assessment and treatment on topics like the intersection of identities and sensitivity language
Organization & Community	**Investigators** • Determine whether addressing patient social determinants of health may improve tobacco treatment utilization and reach • Assess how an annual community needs survey can inform tobacco treatment programming	**Investigators, Clinicians, and Administrators** • Mitigate community stigma about tobacco use after cancer diagnosis • Link tobacco use screening and treatment to required quality metrics • Partner with Community, Outreach, and Engagement Offices to optimize reach
Society & Policy	**Investigators** • Be aware and evaluate the impact of new and emerging tobacco control policies on health equity for populations of interest	**Investigators, Clinicians, and Administrators** • Educate local policymakers and tobacco treatment staff about the science of tobacco treatment and alternative tobacco products, menthol, and treatment methods to quickly address these matters within catchment areas

Abbreviation: DEI, diversity, equity, and inclusion.

Sacramento later implemented a retail ban on all flavored tobacco products, including menthol.[14] Subsequent education was requested by and provided to the state assembly. A statewide law for a retail ban on flavored tobacco products, including menthol, was to take effect in 2021, but implementation has been delayed due to a referendum sponsored by the tobacco industry.[14]

DEI-Specific Research and Implementation Approaches in Cancer Center Tobacco Treatment Programming

These 3 C3I sites each considered their community's and patients' unique needs and tailored their tobacco treatment program in response. As more cancer centers investigate tobacco-related inequities and implement tobacco treatment programs, it will be important to consider DEI-related research and implementation strategies across the socioecological levels of influence, and equally important to consider specifically what investigators, clinicians, and administrators can practice and implement. Table 1 presents some recommendations for such DEI-oriented research and practice activities.

Our hope is that as cancer centers develop and continue to implement evidence-based tobacco treatment programs, DEI considerations will be routinely and mindfully incorporated at each level of socioecological influence to optimize tobacco treatment and eliminate inequities for population-level cancer and tobacco treatment outcomes.

Cancer Center Cessation Diversity, Equity, and Inclusion Working Group Members

Rashelle B. Hayes, PhD[1,*]; Jessica L. Burris, PhD[2,*]; Elisa K. Tong, MD, MA[3,*]; Niharika Khanna, MBBS, MD, DGO[4,†]; Ursula Tsosie, MS[5,†]; Sarah D. Hohl, PhD[6,†]; Kimlin Ashing, PhD[7,‡]; Gleneara E. Bates-Pappas, LMSW[8,‡]; Lisa Sanderson Cox, PhD[9,‡]; Stephanie Craven Bunch, MPH, TTS[10,‡]; Adam

Gaynor, MPH, CHES[4,‡]; Mercy Laurino, MS, CGC, PhD[5,‡]; Katie L. Lenhoff, MPH[11,‡]; Christine E. Sheffer, PhD[12,‡]; Matthew Triplette, MD, MPH[13,‡]; Sophia Yeung, MHA, CTTS[7,‡]; Robert Adsit, MEd[14,§]; Mara Minion, MA[6,§]; Danielle Pauk, BS[6,§]; and Betsy Rolland, PhD, MLIS, MPH[6,15,§]

[1]Department of Psychiatry and Massey Cancer Center, Virginia Commonwealth University, Richmond, Virginia; [2]Department of Psychology and Markey Cancer Center, University of Kentucky, Lexington, Kentucky; [3]Department of Internal Medicine, University of California Davis Comprehensive Cancer Center, Sacramento, California; [4]Department of Family Medicine, University of Maryland School of Medicine, Baltimore, Maryland; [5]Cancer Genetics and Prevention, Seattle Cancer Care Alliance, Seattle, Washington; [6]Carbone Cancer Center, School of Medicine and Public Health, University of Wisconsin-Madison, Madison, Wisconsin; [7]Department of Population Sciences, City of Hope National Medical Center, Duarte, California; [8]Department of Psychiatry and Behavioral Science, Memorial Sloan Kettering Cancer Center, New York, New York; [9]Department of Population Health, University of Kansas School of Medicine, Kansas City, Kansas; [10]Department of Physiology and Pharmacology, Wake Forest School of Medicine, Winston-Salem, North Carolina; [11]Dartmouth-Hitchcock Norris Cotton Cancer Center, Lebanon, New Hampshire; [12]Department of Health Behavior, Roswell Park Comprehensive Cancer Center, Buffalo, New York; [13]Clinical Research Division, Fred Hutchinson Cancer Research Center; Department of Medicine, University of Washington, Seattle, Washington; [14]Department of Medicine, Center for Tobacco Research and Intervention, School of Medicine and Public Health, University of Wisconsin-Madison, Madison, Wisconsin; and [15]Institute for Clinical and Translational Research, University of Wisconsin-Madison, Madison, Wisconsin.

*Working Group Chair; †Writing Group Author; ‡Working Group Author; §Coordinating Center Author.

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Correspondence: Rashelle B. Hayes, PhD, Department of Psychiatry, Virginia Commonwealth University, 501 North 2nd Street, Suite 400A, Richmond, VA 23298. Email: rashelle.hayes@vcuhealth.org

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