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## Research to Move Policy — Using Evidence to Advance Health Equity for Substance Use Disorders

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Recial and ethnic disparities in treatment access and outcomes among patients with substance use disorders (SUDs) have widened, despite substantial efforts to address the epidemic

of drug-overdose deaths in the United States. Rates of overdose death are rising faster in Black, Latinx, and American Indian and Alaska Native populations than in White populations.1 Members of some of these groups also use medications for opioid use disorder (such as methadone, buprenorphine, and naltrexone) at lower rates, have worse health outcomes in the context of SUD, and are more likely to be targeted by police and incarcerated for drug possession than their White counterparts.2 Addressing the overdose epidemic requires eliminating racial and ethnic disparities — along with socioeconomic, gender-based, and geographic disparities - in SUD prevention and care. Prioritizing research that informs policy could help advance equity in SUD-related outcomes.

Existing disparities highlight potential areas for improvement, including the translation of research findings into practice. Opportunities exist for improving access to evidence-based treatment in underserved populations. Numerous trials have documented the efficacy of medications for opioid use disorder and other SUD interventions. But such treatments are often less available to members of historically marginalized groups than to White patients. Ensuring that all people with SUD receive evidence-based treatment will require overcoming barriers to high-quality care,

such as lower rates of adequate health insurance among Black, Latinx, and American Indian and Alaska Native populations than among White populations; a dearth of community-based clinicians who treat uninsured and underinsured people; stigma surrounding SUDs; underinvestment by the public sector in historically marginalized communities; and limited access to digital tools in many of these communities. Possible approaches for addressing these needs include developing evidence-based and culturally informed telehealth models, establishing mobile units for dispensing medications for opioid use disorder, supporting the provision of these medications by pharmacies, adopting collaborative-care models focused on equity, and expanding access to high-quality care by means of partnerships between the criminal justice system and community-based providers, such as outpatient treatment programs and mental health clinics.<sup>3</sup>

Another opportunity involves intervening to address social determinants of health. There has been limited research examining how to most effectively address social determinants of health to improve SUD-related outcomes; approaches include focusing on underlying issues related to structural racism (e.g., inequities in housing, food, employment, and criminal justice systems based on race and ethnic group) and helping people in recovery from SUDs participate more fully in society. For example, the positive effects of having equitable access to housing and employment may help counteract maladaptive behaviors associated with SUDs that perpetuate drug use.

Research that considers the ways in which social determinants of health affect engagement in SUD treatment and SUD-related outcomes could help reduce disparities in these areas. Studies focused on approaches for addressing social determinants in clinical practice - including partnering with community services (e.g., faith-based institutions, local businesses, and nonprofit organizations) and engaging with communities themselves - and on implementation of these approaches could also help narrow inequities in access to care and outcomes.

Prevention is another key area of focus. It's important to develop and implement interventions that minimize the chances that people will be unnecessarily exposed to opioids and other drugs or will misuse them. In addition to addressing social determinants of health, preventive interventions could prioritize populations at elevated risk for SUDs, such as

people who are prescribed opioids for pain or people who have a family history of SUD or psychiatric conditions but may not have initiated substance use. For people who have started using drugs, early recognition and intervention could prevent escalation of drug use and transition to an SUD. Some such interventions have already been developed, but additional research may be required to ensure that they are acceptable and effective in various racial and ethnic groups and don't exacerbate inequities.4

A final opportunity involves supporting data science. Achieving equity will require advances in data collection and modeling to help data end users - such as formal health care systems, de facto ones (e.g., the criminal justice system), and policymakers ensure that approaches benefit all groups and don't perpetuate structural racism. Examples of such advances include assessing existing data and algorithms for biases, embedding information on substance use and social determinants of health in electronic medical records (with appropriate safeguards for protecting patient confidentiality), furthering the harmonization of electronic medical record entries and other information and the linkage of various databases, enhancing data interoperability, and using simulations or distributed research and data networks to assess the effects of ongoing or planned interventions in specific groups.

Ensuring that research reduces disparities will require multiple steps. The first step is to include members of underrepresented groups in the development of preventive interventions and treatments. Engaging such groups could help investigators determine what research is most important

to communities, tailor interventions to increase acceptability, and use measures that matter to patients. People with personal experience with SUD and their families could be involved during study design and throughout the study period.

The second step is to adequately recruit members of historically underrepresented groups, including those with varying levels of education, and ensure that studies are large enough to measure differences in outcomes according to race and ethnic group. Systematic reviews conducted by the Agency for Healthcare Research and Quality and for the U.S. Preventive Services Task Force often find insufficient data to assess prevention and treatment approaches among underserved groups.<sup>5</sup> Recruiting representative study populations will require intentional efforts to ensure equitable outreach and to overcome distrust of medical research among these communities, which stems from a long history of exploitation and unethical research practices. Use of research methods (including data-acquisition, measurement, and analytic approaches) that take into account cultural differences would expand knowledge bases.

Third, investigators could increase the likelihood that programs will be adopted, effectively implemented, and sustained by establishing equitable partnerships with people who currently have or previously have had SUDs and their families, clinicians, policymakers, payers, and advocates and by engaging these groups in evidence production, including by fully sharing study findings with participating communities. Systems established for clinical trials often don't use existing community resources and partnerships.

Developing and implementing interventions in partnership with communities could help bring effective approaches to underserved groups that are often left out of research and policy decisions.

Fourth, it will be essential to diversify the scientific workforce, which will require a multipronged approach involving funders, professional organizations, and teaching and research institutions. Such an approach could include recruiting candidates from underrepresented groups for training opportunities, strengthening partnerships with institutions and science organizations serving these groups, and establishing grant programs that facilitate entry of researchers from diverse backgrounds.

Finally, disparities in SUD-related outcomes can't be eliminated unless investigators measure the effects of policies and interventions on equity. Investigators could aim to identify factors that have the greatest influence on disparate outcomes to ensure that policies and interventions address these variables. They will also need to consider the complex nature of disparities to avoid attributing outcomes associated with systemic inequities to inher-

ent differences based on race or ethnic group, which would compound systemic bias. Studies could enroll disproportionate numbers of patients with multiple coexisting conditions and evaluate the effects of these conditions on SUD-related health outcomes to better address issues affecting underserved populations. To ensure that scarce resources go to interventions supporting equity, investigators seeking to adapt interventions to the needs of specific racial and ethnic groups could compare their effects with and without adaptations and determine whether adaptation is necessary.

Applying an equity lens to efforts to address the worsening overdose epidemic and other SUDrelated harms is critical to eliminating racial and ethnic disparities and improving health outcomes. Such an approach could also serve as a framework for narrowing disparities in other patient populations. Considering community input in research design; engaging patients, communities, payers, and policymakers; and reexamining choices regarding study outcomes and measurement strategies could transform our approaches for pursuing equity and ultimately improve health and well-being in historically underserved groups.

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## **Climate Change in the Supreme Court**

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In West Virginia v. Environmental Protection Agency (EPA), the Supreme Court is expected to decide how far the EPA may go in regulating greenhouse-gas emissions from coal-fired and gas-fired power plants under the Clean Air Act. The case arises under a specific provision of the act, section 111, which authorizes the EPA to set standards for stationary

sources of air pollution. Potentially, however, the case will have far broader implications, not only for the Clean Air Act but also for other federal statutory frameworks that aim to protect public health and the environment.

The Clean Air Act is lengthy and complicated, and the opposing sides in West Virginia have offered an array of arguments as to why it should be interpreted as supporting their views. Central to all the arguments, though, is a single passage in section 111, charging the EPA with setting standards for stationary sources that reflect the "best system of emission reduction." Does the "best system" include only those emission controls, such as on-site efficiency improvements, that can