C2DREAM Awarded NIMHD Supplement Grants: Expanding Health Equity Research in Minnesota
Innovative Projects Aiming to Improve Heart Health and Promote Smoking Cessation Among African Americans in Minnesota

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The Center for Chronic Disease Reduction and Equity Promotion Across Minnesota (C2DREAM) is excited to announce that it was recently awarded two P50 supplemental grants totaling $3.99 million over three years from the National Institute on Minority Health and Health Disparities (NIMHD), part of the National Institutes of Health (NIH). These grants will support R01-level studies that aim to enhance the overall health of African Americans in Minnesota using innovative technologies, while also addressing inequities in chronic health conditions within these communities.

In fiscal year 2021, NIMHD allocated $11 billion for grants to 11 P50 Centers nationwide, focusing on addressing inequities in multiple chronic conditions (MCC). As one of these centers, C2DREAM aims to develop innovative interventions to combat the disproportionate burden of cardiovascular disease, hypertension, and obesity within minoritized communities across Minnesota.

"We are extremely excited to expand the research studies that are supported through C2DREAM," said Dr. Michele Allen, family medicine physician, associate professor at the University of Minnesota Medical School, and co-principal investigator for C2DREAM. "Both of these studies represent innovative, health equity research using technologies to address key areas of health inequities, and further C2DREAM's focus on community-engaged, anti-racist research approaches."

The funded projects include:

Techquity by FAITH!
Location: Twin Cities and Southeastern, MN

Led by preventive cardiologist and Associate Professor of Medicine, Dr. LaPrincess Brewer of Mayo Clinic, this project aims to improve the heart health of African Americans through a specialized mobile health app enhanced with digital health advocate support. The project will work closely with churches in the Twin Cities and Southeastern Minnesota to train faith leaders in providing technical support and to co-create a toolkit with African American church members. The study will engage

20 churches to assess how digital health advocate support can enhance heart health and technology adoption while also addressing MCC within this community. Along with Dr. Brewer, the research team also includes Drs. Demilade Adedinsewo, Lisa Cooper, Sharonne Hayes, and Christi Patten, along with community consultant Clarence Jones. Additional study partners include the Association of Black Cardiologists, Inc. and Northstar Digital Literacy.

"The transformation to digital healthcare has accelerated, making it important for us to develop innovative and community-centric strategies to bridge the digital divide and foster digital health equity in African American communities," said Dr. Brewer.

Feasibility of Using a Culturally Tailored Conversational Agent for promoting smoking cessation treatment utilization in African Americans who use cigarettes
Location: MN Statewide

Dr. Michael Kotlyar, associate professor at the University of Minnesota College of Pharmacy, Dr. Serguei Pakhomov, professor at the University of Minnesota College of Pharmacy, and Dr. Sandra Japuntich, clinical psychologist and senior investigator at Hennepin Healthcare Research Institute, are leading this project to assist African Americans in quitting smoking. They will develop a culturally sensitive virtual assistant employing artificial intelligence (AI) to support individuals in their journey to quit smoking. This initiative aims to break down barriers caused by racism and increase access to proven smoking cessation methods, contributing to the prevention of MCC within these communities. The study team consists of expertise in behavioral and pharmacological interventions for smoking cessation including Drs. Paul Thuras, Anne Melzer, Warren Mckinney, as well as Jane Schulz and study manager Sheena Dufresne.

"AI is an emerging, extremely powerful technology and it's unknown if it can be effectively used for behavioral treatment. Historically, new medical treatments have been tested primarily on the majority population. We are excited to develop ways that these new technologies can be used to help prevent cardiovascular disease, while centering on the needs of African Americans who smoke." said Dr. Kotlyar on behalf of the study team.

For more information about the funded projects or C2DREAM, please visit mnc2dream.org or contact us directly at C2DREAM@umn.edu.

About C2DREAM

The Center for Chronic Disease Reduction and Equity Promotion Across Minnesota is a statewide effort that brings together regional community stakeholders along with a number of health care experts from a variety of disciplines, drawing on evidence-based medical expertise as well as local and cultural knowledge to reduce disparities in BIPOC communities, including immigrants and refugees, for cardiovascular disease and related chronic conditions.

Regional partnerships of academic institutions include: the University of Minnesota Program in Health Disparity Research, University of Minnesota School of Public Health, the Hennepin Healthcare Research Institute, and the Mayo Clinic and Mayo Clinic Health System.