

Evaluation of Innovative Approaches to Prevent Diabetes and Manage Cardiovascular Disease: The Alliance Project

Julia Liu, MPH Candidate 2021¹; Maura M. Kepper, PhD¹; Ellen Barnidge, PhD²; Katie Stamatakis², PhD; Amy Eyler, PhD¹

1. Washington University in St. Louis, Saint Louis, MO USA
2. Saint Louis University, Saint Louis, MO USA

Background	Research Goals / Objectives	Methods	Results
<ul style="list-style-type: none"> Hypertension is one of the leading causes of cardiovascular disease (CVD). Cardiovascular disease is the leading cause of death in the US Diabetes is a chronic condition on how the body cannot effectively use or make insulin for controlling glucose levels – It is the 7th leading cause of death 10% of the US is diagnosed with diabetes or have pre-diabetes 28% of Missouri’s total preventable hospitalization for diabetes, congestive heart failure, and hypertension are within Saint Louis County and St. Louis City Promise Zone: Federally designated development area where hospitalization rates for diabetes and hypertension were 3.5 and 2.5x higher than the surrounding area The Alliance is a collaboration between 5 partners that are major key stakeholders for targeting better health in the St. Louis region The desired goal is better health outcomes, particularly among disadvantaged populations. 	<p>Test and evaluate innovative strategies to increase enrollment and retention in CDC’s Lifestyle Change Programs to help prevent diabetes and or manage cardiovascular disease in high risk populations / underserved areas</p>	<ol style="list-style-type: none"> Use of guidelines and policies related to team-based care for hypertension and cholesterol Community clinical links for bi-directional referrals and lifestyle change programs 	<p>Data systems (e.g. REDCap) have been established to facilitate accurate, consistent data collection to evaluate efforts across partners. Over the first 11 months of the project, 182 patients have been referred to the Diabetes Prevention Program</p>
	Methods	Results	Long Term Outcomes
	<p>The Alliance uses a community-based approach to learn from the St. Louis community and CHWs the best ways to eliminate barriers to participate in lifestyle change programs to reduce diabetes, hypertension, and high cholesterol.</p> <ol style="list-style-type: none"> Increase access to the lifestyle change programs Bi-directional referrals to assist in enrollment and retaining participants in programs Reporting, monitoring, and tracking of data for diagnosis, prevention, management, and treatment for hypertension and diabetes Skills and capacity of lifestyle coaches and community health workers (CHWs) The adoption of telehealth and mobile application tools Adoption and use of clinical systems and care practices to improve health outcomes 	<p>Current innovative approaches being tested and evaluated include:</p> <ol style="list-style-type: none"> Rideshare referrals to CDC Lifestyle Change Programs for participants who indicated transportation as a barrier Food Market Vouchers for participants who indicated food insecurity as a barrier Online Training (e.g. trauma informed care, racial bias training, communication with patients) for lifestyle coaches and CHWs with a pre/post evaluation on the context Increased capacity of CHWs to refer patients to disease prevention and management Collaboration with local pharmacists to refer patients to the lifestyle change programs and communicate with physicians to facilitate disease prevention and management 	<ul style="list-style-type: none"> Increase number of people with prediabetes in CDC Lifestyle Change Program who have achieved 5% weight loss Decrease proportion of people with diabetes with an A1C > 9 Increased control with known hypertension Increased cholesterol management
		Conclusions	Contact Information & References
		<p>While this project is still ongoing, the Alliance has quickly adapted to unexpected situations like the COVID-19 pandemic to prioritize the residents in the St. Louis region who may benefit from lifestyle change programs.</p>	<p>Contact: Julia Liu: liujulia@wustl.edu</p> <p>Acknowledgements:</p> <p>The Alliance is funded by the CDC’s Division of Diabetes Translation: DP18-1817 : Innovative State and Local Public Health Strategies to Prevent and Manage Diabetes, Heart Disease, and Stroke</p> <p>References available upon request</p>