


# Communities Leading Change: Using Implementation Science to Improve Physical Activity and Nutrition Among Racially Minoritized Communities in Kansas City

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Kansas City, Missouri (United States) is the fifth most economically and racially segregated city in the United States. Black and Latino individuals in Kansas City die up to 18 years earlier than non-Hispanic White individuals. The historical divestment has led to communities on Kansas City's east side having deleterious environments for physical activity and lack of access to healthy food. As a result, these residents, primarily Black and Latino community members, are disproportionately burdened by chronic diseases such as obesity, diabetes, and heart disease. The purpose of this project is to reduce health disparities in chronic disease by increasing physical activity, improving nutrition, and increasing participation in family healthy weight programs for Black and Latino families in Kansas City. This implementation and research protocol describes the Centers for Disease Control and Prevention (CDC)-funded collaborative agreement "Communities Leading Change" to improve long-term health among Black and Latino families in Kansas City. In the short term, we will improve policies, plans, and community design that increases access to physical activity, improve access to fruit and vegetables, and increase support for an evidence-based family healthy weight program. This initiative may inform future practice, policy, and research

by providing an example of a long-term funded project that is community-driven and uses partnerships to create policy, systems, and environmental change.

**Keywords:** nutrition; physical activity; family healthy weight program; African American; Latino; neighborhood; policy change; system change; environmental change

## ► BACKGROUND

Translating evidence-based practices into real-world outcomes is essential to improve population-level physical activity and nutrition. Adapting, scaling,

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and broadly implementing well-established evidence-based practices into large coalitions, governments, and health organizations to improve population health is the last stage in translational research (T4) (Zarbin, 2020). However, implementing T4 translational research into the real world is difficult and requires a vast evidence base, engagement from the community, government organizations, policy makers, and others to achieve long-lasting changes in policy and practice (Towfighi et al., 2020). These difficulties are more compounded in racially minoritized communities, where system-level contributors such as lack of culturally-appropriate community engagement limit recruitment of racially minoritized populations into research studies (Ahaghotu et al., 2016; Brooks et al., 2015). As T4 translation is the ultimate goal of public health researchers aiming to improve physical activity and nutrition for populations experiencing health inequities, more large-scale studies need to be conducted (Glasgow et al., 2022).

Proctor's Model of Implementation Research serves as a guide to understand which evidence-based practices are used (intervention strategies), how the interventionists implement those evidence-based practices (implementation strategies), and how the implementation, service, and client outcomes change due to the intervention (Proctor et al., 2011). Evidence-based practices for physical activity and nutrition are clearly outlined in The Community Guide for Preventive Services (The Community Guide, 2023a, 2023c). Powell et al. (2015) identified and categorized 73 implementation strategies used to create change. Examples of these implementation strategies include conducting local needs assessments, providing technical assistance, tailoring strategies, building a coalition, and developing educational material. The Reach, Effectiveness, Adoption, Implementation, Maintenance (RE-AIM) model assesses important characteristics of implementation and service outcomes and is the most widely used implementation framework in health behavior change research (Glasgow et al., 2022). By coupling Proctor's Model of Implementation Research and RE-AIM, researchers can fully assess the process and outcomes of T4 translation.

Implementing translational research has been noted by U.S. federal agencies to improve health outcomes (Fleming et al., 2008). As such, in 2023, the Centers for Disease Control and Prevention, Division of Nutrition, Physical Activity, and Obesity funded 40 projects to reduce inequities in health by increasing physical activity and improving nutrition. The goal of these Racial and Ethnic Approaches to Community Health (REACH) projects was to implement evidence-based T4 translational interventions to improve policy, systems, and environments for physical activity and nutrition. Kansas City,

Missouri (United States) was one community funded under this initiative. The REACH program has had many successes including increasing opportunities to be physically active and increasing access to prevention and management of chronic diseases for 600,000 people in the United States (REACH, 2025).

The Kansas City metro area is the fifth most economically and racially segregated city in the United States (The Cost of Segregation, 2017). This segregation, stemming from the redlined nature of the city, has resulted in an 18-year life expectancy gap between Black and Latino individuals and non-Hispanic White individuals of Kansas City. The divestment that followed redlining led to communities on Kansas City's eastside having deleterious environments for physical activity and lack of access to healthy food (U.S. Department of Agriculture, 2023). These residents, primarily Black and Latino community members, are disproportionately burdened by chronic diseases such as diabetes and heart disease (Kansas City Community Health Assessment, 2020). Furthermore, Black and Latino residents do not have sufficient access to health care, such as weight-management clinics, that can buffer some of the environment impacts of poor built environments (Washington et al., 2023).

## ► PURPOSE

The purpose of this protocol is to describe the Kansas City Centers for Disease Control and Prevention (CDC) REACH-funded, community-based, multi-sectoral intervention "Communities Leading Change" to understand the implementation of evidence-based intervention strategies for physical activity, nutrition, and family healthy weight programs (FWHPs) for Black and Latino members of Kansas City. We will use Proctor's Model of Implementation Research and RE-AIM framework to assess implementation. Future results will be provided on implementation strategies and outcomes specific to physical activity, nutrition, and family health weight programming based on this research protocol.

## ► METHODS

We describe the protocol informing the collaborative agreement to improve community health in Kansas City. This project is a community-based participatory project that is led by community organizations including a local bike and pedestrian advocacy organization, a team of community-based organizations that specialize in nutrition within the priority population, a local federally qualified health center (FQHC) with the assistance of researchers, clinicians, and in partnership with staff from the CDC. There are three pillars to this project:

increasing physical activity, improving nutrition, and improving access to family healthy weight programming. Appropriate institutional review board approvals and institutional reliance will be obtained prior to data collection and analysis. Informed consent will be obtained for data collected by surveys (e.g., organizational survey and social network survey).

## ► PRIORITY POPULATION

This study prioritizes Black and Latino families residing in neighborhoods in 10 contiguous ZIP codes (e.g., 64109, 64128, 64129, and 64130) in Kansas City. These have been identified as *high priority ZIP codes* due to the large disparity in life expectancy (18 years) compared to other parts of the city (Kansas City Community Health Assessment, 2020). The total population in the priority ZIP codes is 125,491, where 47% of the residents are Black (with ZIP code 64128 being 86% Black), 17% are Hispanic, and 38% are non-Hispanic White. The median household income for this population is \$30,673. People in these priority ZIP codes experience numerous health inequities including higher rates of heart disease, stroke, and diabetes (Kansas City Community Health Assessment, 2020). Complications and hospitalizations due to chronic diseases (e.g., diabetes and heart disease) are also experienced disproportionately by residents of color in Missouri (Missouri Department of Health and Senior Services, 2020). Physical activity can greatly contribute to prevention of chronic diseases, but 50% of residents who live in the priority ZIP codes report NO leisure time physical activity (Kansas City Community Health Assessment, 2020), compared to about 25% of people nationwide (25.3%) (CDC, 2024a).

## ► IMPLEMENTATION INFRASTRUCTURE

Table 1 presents the components of the collaborative infrastructure that guides the implementation of this project. The Kansas City Healthy Lifestyles Collaborative (Kansas City HLC), a group of >1,000 individuals representing community organizations that include representation from health care, parks and recreation, public health, schools, early childhood centers, sports teams and groups, and businesses will act as the overall coalition for this project. The Kansas City HLC will provide oversight, partnerships among organizations, bridge silos, and improve the system-level coordination (infrastructure) of organizations working to improve physical activity and nutrition, with the goals of increasing penetration and acceptability of the project. The REACH Committee is the key working group to support this project and consists of the principal investigators, program

manager, and funded community organizations that are implementing the interventions. Physical activity, nutrition, and FWHP have core areas consisting of the PI of that section and community organization or organizations that are leading implementation. The REACH program manager trains stakeholders, provides technical assistance, and assists in evaluation. The Evaluation Core consists of external evaluators from a partner institution who design, evaluate, and provide feedback to the REACH Committee. The Evaluation Core meets weekly independently and with the REACH Committee. Evaluation feedback is provided semi-annually and as needed to inform changes to the program. All components work together to cohesively implement the core components of the intervention as shown in Table 1.

## ► CORE COMPONENTS OF INTERVENTION AND EVIDENCE BASE

### *Physical Activity*

Within the physical activity pillar we aim to (a) improve policies for active transportation (i.e., update Kansas City's walkability plan); (b) provide education (i.e., transportation academy) and technical assistance (i.e., guidance on applying for community-driven improvement projects) to community members and organizations that promotes active transportation and physical activity; and (c) track implementation projects that result in community design changes (i.e., crosswalk, sidewalk, bike lanes) to increase active transportation opportunities in predominately Black and Latino neighborhoods.

To achieve these aims, BikeWalkKC (BWKC) will (a) lead advocacy efforts to update Kansas City's walkability plan that has not been updated since 2003 and (b) provide community-based education through technical assistance and curriculum-based sessions to educate and train community members and organizations on how to apply and utilize government sponsored opportunities to improve built environments that improve walkability and bikeability. One such government opportunity is Public Improvement Advisory Committee (PIAC) funds. PIAC projects are proposed by residents to recommend areas for improvements throughout the city. Residents are asked to fill out a request form to bring attention to areas that need repair, reconstruction, or development. Priority neighborhoods have historically been areas of disinvestment and burden, experiencing disproportionate traffic crashes including those involving Black and Latino pedestrians and bicyclists. BWKC will examine how the proportion of funded PIAC applications are for projects that support active living and healthy lifestyles

**TABLE 1**  
**Implementation Infrastructure**

<i>Component</i>	<i>Description</i>	<i>Implementation strategies<sup>a</sup></i>	<i>Implementation outcomes<sup>b</sup></i>
Kansas City Healthy Lifestyles Collaborative	PIs, Program Manager, and community-based organizations responsible for supporting implementation efforts, evaluation, and communications activities.	<ul style="list-style-type: none"> <li>- Provide oversight</li> <li>- Develop stakeholder partnerships</li> <li>- Change infrastructure</li> <li>- Build a coalition</li> </ul>	<ul style="list-style-type: none"> <li>- Increase penetration</li> <li>- Increase acceptability</li> </ul>
REACH Committee	PIs, Program Manager, and funded organizations meet monthly to share information and discuss potential problems	<ul style="list-style-type: none"> <li>- Access new funding</li> <li>- Develop academic partnership</li> <li>- Engage multiple stakeholders</li> <li>- Capture and share local knowledge</li> </ul>	<ul style="list-style-type: none"> <li>- Increase penetration</li> <li>- Increase acceptability</li> <li>- Increase feasibility</li> <li>- Increase sustainability</li> </ul>
Physical Activity Core	PIs and BikeWalkKC responsible for implementing the physical activity intervention	<ul style="list-style-type: none"> <li>- Access new or existing funding</li> <li>- Evaluate and change infrastructure</li> <li>- Engage multiple stakeholders</li> <li>- Capture and share local knowledge</li> </ul>	<ul style="list-style-type: none"> <li>- Increase penetration</li> <li>- Increase acceptability</li> <li>- Increase feasibility</li> <li>- Increase sustainability</li> </ul>
Nutrition Core	PIs and community partners (University of Missouri Extension, Kanbe's Market, University Health, Mid-American Regional Council) responsible for implementing the nutrition intervention	<ul style="list-style-type: none"> <li>- Access new or existing funding</li> <li>- Evaluate and change infrastructure</li> <li>- Engage multiple stakeholders</li> <li>- Capture and share local knowledge</li> </ul>	<ul style="list-style-type: none"> <li>- Increase penetration</li> <li>- Increase acceptability</li> <li>- Increase feasibility</li> <li>- Increase sustainability</li> </ul>
FHWP Core	PIs and Swope Health Centers responsible for implementing the FHWP intervention	<ul style="list-style-type: none"> <li>- Fund and contract</li> <li>- Change service sites</li> <li>- Conduct ongoing training</li> <li>- Develop educational materials</li> <li>- Provide local technical assistance</li> </ul>	<ul style="list-style-type: none"> <li>- Increase penetration</li> <li>- Increase acceptability</li> <li>- Increase feasibility</li> <li>- Increase sustainability</li> </ul>
REACH Program Manager	Full-time staff member responsible for day-to-day implementation	<ul style="list-style-type: none"> <li>- Train and educate stakeholders</li> <li>- Interactive assistance</li> </ul>	<ul style="list-style-type: none"> <li>- Increase adoption</li> <li>- Increase penetration</li> <li>- Increase fidelity</li> <li>- Increase sustainability</li> </ul>
Evaluation Core	External evaluators responsible for overseeing all aspects of evaluation	<ul style="list-style-type: none"> <li>- Evaluate and iterate strategies</li> <li>- Purposefully reexamine implementation</li> <li>- Change record system</li> </ul>	<ul style="list-style-type: none"> <li>- Increase fidelity</li> <li>- Increase adoption</li> </ul>

<sup>a</sup>Implementation strategies from Powell et al. (2015). <sup>b</sup>Implementation outcomes from Proctor et al. (2011).

and will compare differences between the priority area of this project and the rest of the city.

The Community Preventive Services Task Force recommends built environment strategies that combine at least one intervention to improve pedestrian or bicycle transportation system with at least one environmental design intervention (i.e., park improvements) to increase physical activity (The Community Guide, 2023b). Fatal and serious injury bicycling and pedestrian crashes have trended upward in the past decade (National Highway

Traffic Safety Administration, 2022). Furthermore, BWKC's recent work found that a higher prevalence of bike/pedestrian crashes happen in neighborhoods with greater proportions of Black and Latino residents, which rates of pedestrian activity and biking do not explain (Harris, 2022). Black bicyclists and pedestrians had a higher proportion of crashes, making up 40% of pedestrian fatalities and 44% of bicycle fatalities, while accounting for only 26% of the population. Younger bicyclists (10–20 years) and middle-aged pedestrians



(35–54 years) also had disproportionate fatalities, with 10- to 15-year-olds having 3.5 times an increased proportion of fatal crashes. Evidence suggests that even low-cost “quick-build” projects that modify the streetscape for pedestrian safety are promising for increasing pedestrian activity and walking (Carlson et al., 2019).

### **Nutrition**

Within the nutrition pillar, we aim to improve accessibility to fresh fruits and vegetables by (a) having University of Missouri Extension implement the Food Services Guidelines (FSG) for food and nutrition, behavioral design, facility efficacy, environmental support, and community development; (b) increasing access to fresh produce for those receiving federal food assistance through food voucher programs; and (c) enhance infrastructure in University Health that supports produce prescription programs.

Nutrition aims will be achieved by (a) collaborating with the local extension office and other Kansas City government agencies (e.g., local health department, parks and recreation) to address healthy food policies through the implementation of Eat Smart in Parks (ESIP) (Missouri Extension, 2024); (b) Kanbe’s Market and Mid-America Regional Council will expand the Double up Food Bucks food voucher (DUFb) program to build capacity for redemption at convenience store locations in low-food-access neighborhoods in the priority community (Double Up Food Bucks, 2024); and (c) evaluating the existing produce prescription climate in the target area to identify support needs that enhance infrastructure and procedures.

In the priority area for this project, 7.3% of people with incomes less than 130% of the federal poverty level reported low access to supermarkets (KC Healthy Kids, 2023). In addition, families experiencing food insecurity in this area report limited access to fresh fruits and vegetables that may lead to poorer diet quality and lower food security (Bennett et al., 2022). Creating policy and system changes that can make healthy food (e.g., fresh produce) more available in public spaces can increase consumption and support positive health outcomes (Westbury et al., 2021). Beyond having more locations to access fresh produce, affordability of food is another accessibility pathway (Kamphuis et al., 2006).

The Supplemental Nutrition Assistance Program (SNAP) is a federally funded nutrition program that has been connected to positive economic, health, and food security outcomes for its participants (Sonik, 2016). DUFb is a national program that incentivizes SNAP participants to purchase fresh fruits and vegetables by matching dollar for dollar produce purchased with

SNAP benefits that is associated with increased fruit and vegetable consumption and food security (Durward et al., 2019). Creating more opportunities for SNAP recipients to purchase the food they need through increasing the number of participating vendors is an important strategy to improve food access and reduce barriers among eligible participants (Leung et al., 2017; Masci et al., 2020). There are clear connections between diet quality, food insecurity, fruit and vegetable consumption, and health outcomes (Gundersen & Ziliak, 2015; Hanson & Connor, 2014). As more interventions emerge to address food as medicine, so do diverse multi-sector partnerships to provide healthy food to individuals with existing or emerging chronic diseases (Marchis et al., 2019). Produce prescription programs support partnerships between the health care and food sectors to provide discounted or free produce (e.g., fresh fruits and vegetables) to patients with at least one diet-sensitive risk factor or chronic disease (Mozaffarian et al., 2022).

### **Family Healthy Weight Program**

Within the FHWP pillar, we aim to support implementation to (a) enhance and expand FHWP delivery and (b) work with Swope Health Centers to create community-clinical linkages between community activities and family healthy weight programming. These strategies will be accomplished through collaborating with Children Mercy Hospital’s primary care clinic, which serves patients in the project’s priority zip codes, and which is implementing a CDC-recognized FHWP, to strengthen partnerships, improve training and delivery and enhance equitable implementation. In addition, the project staff will use these experiences to collaborate with new clinical partners to implement an FHWP at Swope Health Centers, an FQHC serving patients in the project’s priority area. The FHWP pillar team will collaborate with the nutrition and physical activity REACH partners to link families participating in the FWHPs to community resources to support family health goals.

FWHPs are evidence-based multicomponent treatment interventions delivering at least 26 hours of nutrition, physical activity, and behavior change support in the context of the family unit over a 3- to 12-month period (CDC, 2024b). Increasing access to FHWP for Black and Latino families is essential to increase reach and improve health equity (Hampl et al., 2023). Family-based behavioral treatment, a type of FWHP, has been challenged by lower than expected referral, enrollment and completion rates at Children Mercy Hospital’s primary care clinics that may be linked to multiple social risk factors facing families (Vazquez & Cubbin, 2020). Increasing understanding of barriers and facilitators

from the perspectives of primary care providers, family, and FHWP interventionists is a priority to improve the intervention and its continued delivery in this setting.

### ***Implementation Evaluation and Data Collection***

We will use Proctor's Model of Implementation and RE-AIM to track progress of the implementation of this intervention. Table 2 outlines the evaluation of each implementation measure. Implementation strategies are provided as evidence-based practices above. Annually, investigators will conduct a review of policies/procedures to ensure that the core components of the intervention are being delivered. In addition, organizations will provide monthly logs that will describe their evidence-based practices. Implementation strategies will be assessed via an annual survey of organizations using an adapted list of 73 implementation strategies (Powell et al., 2015). Examples of implementation strategies include facilitation, identifying and preparing champions, building a coalition, providing local technical assistance, and developing educational materials.

RE-AIM constructs will be assessed using program logs, participant intercept surveys, annual survey of organizations, and an investigator review of policies/practices. In this project, reach is operationalized as the percentage and repetitiveness of the population impacted by new/improved policies or changes to systems and the built environment. Data on reach will be collected by organizations reporting in program logs who is impacted by the intervention. Effectiveness is operationalized as the change in behavior (increases in physical activity, improvements in nutrition, reduction in weight), quality of life, and the number/type of unintended consequences. Data on effectiveness will be collected from an annual review of secondary data (Behavioral Risk Factor Surveillance System, American Community Survey mode share, Current Population Survey, National Health and Nutrition Examination Survey, SNAP enrollment reports), and program logs. Adoption is operationalized as the number and representativeness of organizations participating in this project and will be measured by the annual survey of organizations and program logs. Implementation is operationalized as the number of evidence-based practices implemented and the number and success of new/improved policies developed. Data on implementation will be collected through program logs. Maintenance is operationalized as the length-of-time policies are implemented and number and type of interventions sustained for more than 1 year. Data on maintenance will be collected through program logs.

*Survey of Organizations.* Annually, all staff from all organizations funded under this initiative will participate in

a survey that will measure implementation strategies, implementation outcomes, and social networks. The survey is presented in Sup 1 and includes both quantitative and qualitative variables. The survey has been designed by an advisory team of individuals from the organizations funded. Organizations will report on their area of focus (physical activity, nutrition, or family health weight program), how long they have worked in the field, what they're doing on this project, and who they go to for support on this project. Implementation strategies will be assessed by staff reporting which of the 73 implementation strategies from Powell et al. (2015) were used. Perceptions of service and implementation outcomes will be assessed by staff reporting perceptions of implementation outcomes on 5-point Likert-type scales (definitely yes to definitely not). This scale has been used in a previous study among a similar group of practitioners (Lightner et al., 2022). Social networks will be assessed with staff reporting people who they work with on this project and characteristics about their work relationships (levels of interaction, trust, support).

*Program Logs.* The proposed evaluation also includes collection of several measures that will occur through the documentation of program records. Logs assess the implementation activities, program measures, challenges, assets, progress (including milestones for the project), and next steps of each area. Program logs were developed in collaboration with organizations on this project and include both quantitative and qualitative variables. For physical activity, this includes active transportation-related advocacy and community-based education. Program staff maintain records that document type of programming (i.e., technical assistance), site, start/end date, council district, staff time, expenses, and number of participants. For nutrition, this includes DUF, produce prescription, and FSG partner organizations. Program staff maintain records of the number of users, the demographics of users, and the number of benefits redeemed. For FHWP, it is number of staff trained to deliver curriculum and other competencies; number of people recruited, retained, and completed the program by race and ethnicity; number and type of referrals to community resources; and the results of referrals.

*Secondary Data of Participant Outcomes.* Annually, program managers will assess secondary data to understand population health outcomes. Physical activity will be assessed using data from the Behavioral Risk Factor Surveillance System and the American Community Survey mode share. Access to fresh produce will use the Current Population Survey and National Health

**TABLE 2**  
**Evaluation and Data Collection**

<i>Dimension</i>	<i>Operationalized in study</i>	<i>Time-point and measure</i>
Intervention strategies	List of evidence-based practices used by organizations	Monthly: program logs
Implementation strategies	Strategies used to change implementation outcomes	Annually: survey of organizations
<b>RE-AIM constructs</b>		
Reach—number, proportion and representativeness of places and individuals	<ul style="list-style-type: none"> <li>- Number and representativeness of places where the intervention has been implemented</li> <li>- Number and representativeness of individuals accessing infrastructure and services where the intervention has been implemented</li> </ul>	Annually: secondary data of participant outcomes Monthly: program logs
Effectiveness—impact of intervention on outcomes	<ul style="list-style-type: none"> <li>- Change in physical activity, nutrition, and weight of participants</li> <li>- Change in quality of life and health outcomes</li> <li>- Number and type of unintended consequences</li> </ul>	Annually: secondary data of participant outcomes Monthly: program logs
Adoption—number, proportion, and representativeness of organizations who implement the intervention	<ul style="list-style-type: none"> <li>- Number and representativeness of organizations implementing the intervention</li> </ul>	Annually: secondary data of participant outcomes Monthly: program logs
Implementation—fidelity to the core components of the intervention	<ul style="list-style-type: none"> <li>- Number and representativeness of organizations implementing the intervention</li> <li>- Number and type of policies/practices changed</li> </ul>	Monthly: program logs
Maintenance—sustainability over time	<ul style="list-style-type: none"> <li>- Number and type of interventions sustained</li> </ul>	Annually: Review of policies and practices Monthly: program logs

and Nutrition Examination Survey, Access to DUFB and SNAP will use SNAP enrollment and DUFB reports. FHWP will use data from local health care providers implementing new FHWPs.

### **Data Analysis**

**Quantitative Data.** Data from surveys of organizations will be collected in Qualtrics. Univariate (frequencies and means) and multivariate (chi-square, Wilcoxon sign rank, ANOVA, linear regression) statistics will be conducted in SPSS to understand the frequency of implementation strategy and service/implementation outcome by program type. Whole social network data will be analyzed using network density, community detection, and path analysis with a focus on betweenness and closeness centralities. Personal networks will be analyzed for network composition factors associated with implementation outcomes as well as determining significant changes in networks over the course of the funding period. All networks data will be analyzed

using RStudio and the statnet package (RStudio Team, 2020). In addition, subgroup analysis will be conducted on the priority zip codes. Secondary data will be analyzed using univariate statistics (means). Program logs will be collected in RedCap (P. A. Harris et al., 2009). Descriptive statistics (frequencies and means) will be conducted on program logs to report outcomes presented in Table 2.

**Qualitative Data.** Qualitative data will be analyzed separately from quantitative data and will be used to describe the implementation of the project. An initial coding tree will be developed based on RE-AIM constructs. Two research assistants will code all qualitative data using a combination of deductive coding based on the coding tree and inductive adjustments to thematic sub-codes (Saldana, 2015). The research assistants will meet at least quarterly to develop codebook revisions, resolve discrepancies (the senior author will resolve any unresolved conflicts), and finalize the codebook.

Summary outputs will be examined by physical activity, nutrition, and FHWP. Saturation will be assessed throughout data collection and analysis, with tracking occurring with the use of memoing and debriefing.

*Review of Policies/Practices.* Annually, the REACH Committee (see Table 1, the REACH Committee consists of all funded organizations on this project) will meet to ensure that the core components of the intervention are being delivered as proposed in the previous section. Using the worksheet developed for this project, we will review program logs and survey data from organizations to ensure adoption and implementation of policies. In addition, context will be provided, and potential barriers to sustainability will be discussed. This will be used to do adapt the program to ensure sustainability.

### **Dissemination**

We will disseminate all findings from this project using (a) community reports, (b) community presentations, (c) academic presentations, and (d) peer-reviewed manuscripts. Community reports are developed by the program managers, in collaboration with the REACH Committee, and are easily understandable, 1-page reports designed to be shared with community members, local organizations, and policy makers. Community presentations will be conducted by community members of each pillar to community members, local organizations, and policy makers to share results. Academic presentations will be conducted by the PIs and at regional and national conferences. Peer-reviewed manuscripts will be developed by the REACH Committee and Evaluation Core and submitted to high-quality, open access journals so that public health practitioners can use this information to replicate these programs.

## ► **RESULTS**

Year 1 results from this study will be available in 2025. We anticipate that we will identify implementation strategies and potential implementation outcomes of this REACH project in Year 1. In addition, we will describe the social networks of the individuals of this REACH project, as well as the changes in social networks over the 5 years of this project. These results will provide importation contextual information among a predominantly Black and Latino community. We expect the results of this study to provide valuable contextual information on how to conduct T4 translational research in a large city in the Midwest.

## ► **DISCUSSION**

The purpose of this manuscript is to describe the Kansas City REACH-funded, community-based, multi-sectoral intervention “Communities Leading Change” to improve the policy, systems, and the built environment for physical activity, nutrition, and family health weight programs for Black and Latino residents of Kansas City. This work is guided by Proctor’s Model of Implementation Research and the RE-AIM framework. This project hopes to advance the literature by using implementation science to show how a large-scale coalition of academic and community organizations can impact policy, systems, and built environments within the context of the CDC REACH program. Changing the policy, systems, and environment of areas traditionally disinvested in due to structural racism and inequality is essential to improve health outcomes in places like Kansas City, Missouri. We hope this project can provide information so that other communities can replicate this project and potentially improve physical activity and nutrition in other areas.

### **Strengths and Limitations**

There are several strengths of this study. First, we utilize a large coalition consisting of a diverse group of people and organization to guide and implement this project. Second, we use multiple methods to assess the complex nature of implementation. Third, the high level of external validity and rigorous multi-methods approach has the potential to provide valuable insight into T4 translational research. Finally, the intervention in this project relies on policies, systems, and environments that may take years to impact health behavior change and health outcomes, reducing the ability to conclude if the intervention changes health behaviors.

However, as with all studies, this project should also be assessed in light of the limitations. Information on this project will only be collected from one city in the Midwest. Implementation in other cities/areas may be different depending on the context. No randomization of areas or policies occurs in this project, which may make it difficult to determine if potential changes in physical activity and nutrition are due to the intervention and not some other force. Finally, the intervention in this project relies on policies, systems, and environments that may take years to impact health behavior change and health outcomes. We may not be able to conclude that the intervention changes health behaviors.




## Implications for Practice

This study helps to directly inform practice by describing the process by which Kansas City is focusing on policy, system, and environmental change. This protocol serves as a potential model of evaluation for the implementation of other projects focused on policy, system, and environmental change to improve physical activity and nutrition. Local leaders and public health practitioners who want to improve policies, systems, and environment in other communities can use this framework to assess other REACH programs and interventions. Future studies will describe strategies, outcomes, challenges, and other aspects of implementation of our intervention to improve policies, systems, and environments.

## Implications for Research

This project also helps to inform future research by providing a framework of assessment that other current and future REACH grantees can use to evaluate their interventions in other areas of the United States. Standardizing T4 translational research among REACH grantees is essential to understand the outcomes of substantial federal funding to improve physical activity and nutrition. Standardization can allow future studies to assess differences in REACH programming by rurality, demographics, community context, and other factors important for improving policy, systems, and environments for physical activity and nutrition.

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