Collaborative action is a part of Cabarrus Health Alliance’s mission statement. This commentary highlights several community-based initiatives that the Alliance has used to contribute to the Healthiest Cities & Counties Challenge, and demonstrates the importance of using cross-sector partnerships to address health disparities within low-income populations.

Cabarrus Health Alliance’s (CHA) mission “to achieve the highest level of individual and community health through collaborative action” has unified diverse organizations—from the local hospital system to county parks and recreation programs, school districts, and the Faith Community Health Ministry—to deliver environmental health services, clinical services, and community education to people who are considered to be at risk for developing preventable health conditions.

How Cabarrus Health Alliance Entered the Healthiest Cities & Counties Challenge

The Healthiest Cities & Counties Challenge is just one of CHA’s many cross-community collaborations. Participation in the challenge is the second collaborative endeavor for this North Carolina cross-sector team. In the first collaboration, from 2012 to 2015, the Duke University Translational Research Institute initiated a partnership between Durham and Cabarrus counties to implement the Southeastern Diabetes Initiative (SEDI), which was one of 107 federally funded health care innovation awards bestowed by the US Centers for Medicare & Medicaid Services.

In Cabarrus County, the overall goals of SEDI were to improve health indicators for adults with type 2 diabetes, improve health care, and decrease the number of emergency room admissions to reduce medical costs. Through a multilevel approach that included clinical referrals to individualized nutrition education, one-on-one support by trained nurses, telephone coaching sessions, and community-based self-management curriculums, assistance was provided to community members with varying levels of health risks as determined by an algorithm developed by Duke University. Not only did the community-based self-management curriculums positively affect more than 8,000 diabetic community residents, 71% of individuals determined to be high-risk saw a decline in their A1c levels. Furthermore, SEDI leveraged and strengthened partnerships with 13 clinical practices and 85 community partners across Cabarrus County, demonstrating the potential of community-clinical linkages as a model for health promotion. That effort also set the stage for future partnerships between Cabarrus and Durham counties.

In 2016, after the successful collaboration among the SEDI partners, the Duke Translational Research Institute of the North Carolina Research Campus invited CHA to participate in the Healthiest Cities & Counties Challenge as a partner with the Duke-Margolis Center for Health Policy and the Durham County Department of Public Health.

The Aetna Foundation, in partnership with the American Public Health Association and the National Association of Counties, created the Healthiest Cities & Counties Challenge in 2016. The overarching goal of the challenge is to support 50 finalists across 30 states as they work to support healthy lifestyles and make cities and counties suitable places for healthy food and clean water access, safe work, and socialization [1]. To qualify for a portion of the $1.5 million prize, finalists must demonstrate that one of their health interventions could be reproduced to improve population health in 1 of the following 5 areas: healthy behaviors, built environment, community safety, social economic factors, or environmental exposure [1]. Over the course of 2 years (2016–2018), the challenge is enabling city and county public health organizations across the United States to compete to create innovative, effective, and sustainable community-based interventions, while also positively affecting health outcomes and promoting wellness in their respective communities [1, 2]. By uniting to enter the challenge as a cross-sector team, CHA, the Duke-Margolis Center for Health Policy, and the Durham County Department of Public Health are building on a long-standing partnership between counties to combat issues related to food access, low physical activity, and tobacco use, and to pilot community-clinical
linkages via exercise prescriptions and the use of community health workers.

CHA values the opportunity to contribute to the important work being done to improve health outcomes, reduce health disparities, promote health equity, and create sustainable community-based programs. Most importantly, participation in the challenge enables CHA to leverage and strengthen existing community and countywide partnerships as a public health authority.

**Cabarrus County’s Specific Goals**

Over the course of the 2-year challenge, CHA staff are working in the domains of healthy behaviors and built environment to decrease both the percentage of adults who consume fewer than 5 servings of fruits and vegetables per day, and who report no exercise. According to past community health needs assessments, lack of healthy diet and physical activity are reoccurring health concerns in Cabarrus County. In 2015, 85.5% of adults in region 4 of North Carolina (ie, Alexander, Cabarrus, Catawba, Gaston, Iredell, Lincoln, Mecklenburg, Rowan, Stanly, and Union counties) reported consuming fewer than 5 servings of fruits and vegetables per day [3]. Similarly, 28.2% of adults in the same sample reported no exercise per week [4]. CHA is addressing these disparities by building on current initiatives in the Racial and Ethnic Approaches to Community Health (REACH) grant, which works to increase opportunities for African American and Hispanic residents to access nutrition and physical activity resources, improve access to health care, and decrease risks for chronic diseases such as obesity. The CHA team is working to increase the number of healthy corner stores, farmers markets accepting SNAP/EBT (Supplemental Nutrition Assistance Program/Electronic benefit transfer) benefits, facilities with joint use agreements, and physicians providing exercise prescriptions and referrals to local physical activity locations. With a multifactor approach to improving the food environment in Cabarrus County, these efforts are also strengthening partnerships with diverse community organizations.

**Community-Based Initiatives**

**Healthy Corner Stores**

CHA staff are working with food desert-based corner stores that accept SNAP/EBT with the aim of increasing access to healthy foods among low income residents. During the first 2 years of the REACH grant (2014-2016), CHA staff worked with store owners to identify fruits and vegetables to sell that would increase the variety of healthy foods and appeal to their customer base, while also benefiting the store’s profitability. A trained consultant educated store staff in product placement and merchandising so fruits and vegetables could be organized and displayed in aesthetically pleasing ways near the front of the store. The addition of point-of-decision prompts encouraged customers to choose healthy food options; posters displaying images of healthy items improved the physical store space. These small changes to the stores’ environment proved successful—92% of customers surveyed at 1 store felt that spatial improvements made it easier to choose healthy items. Furthermore, 6 corner stores in Cabarrus County have participated in the initiative, and now an estimated 6,800 African American and Hispanic residents have access to healthier foods as a result of the store improvements made during year 2 of REACH. For the Healthiest Cities & Counties Challenge, the healthy corner stores initiative is adding locations in Cabarrus County with the aim of strengthening partnerships and making sustainable changes that will benefit the food environment for many years.

**Farmers Markets**

CHA staff are partnering with local farmers to increase the number of farmers markets accepting SNAP/EBT benefits in exchange for fresh fruits and vegetables. In addition, farmers are encouraged to sell their produce at multiple
locations across the county to provide more people with access to their services. After 2 years of REACH, 6 additional farmers markets have vendors who accept these benefits, which affects an estimated 40,000 African American and Hispanic residents in the area. Efforts to encourage local farmers markets to accept SNAP/EBT will be expanded over the next 2 years, ensuring sustainability in food access and promoting healthy eating among low income residents.

**Joint Use Agreements**

To target the low physical activity indicators in Cabarrus County, CHA staff are working with exercise facilities and local churches to open group fitness opportunities to the public. This effort will give more people access to local resources so they can work toward achieving the physical activity guideline of 150 minutes of physical activity per week. CHA staff support the adoption of these joint use agreements by providing additional physical activity equipment to facilities to increase the capacity for service. Now in the third year of the REACH grant in Cabarrus County, schools are being targeted to open sporting facilities and playgrounds to the public to increase free or low-cost physical activity opportunities. The Healthiest Cities & Counties Challenge is building on existing partnerships between CHA, local school districts, and the faith community to continue to make physical activity facilities accessible via sustainable joint use agreements within the built environment.

**Exercise is Medicine**

Created in 2007, Exercise is Medicine is an international initiative sponsored by the American Medical Association and the American College of Sports Medicine to promote exercise as a component of chronic disease management [5]. As part of the Healthiest Cities & Counties Challenge, CHA members are encouraging providers to include exercise prescriptions in their recommendations for patients. Previously, through the REACH grant, providers from 5 federally qualified health centers (FQHCs) and 6 faith nurses representing 9 local churches were trained to write exercise prescriptions and encourage physical activity in patients suffering from lifestyle-related conditions such as obesity.
Health professionals were given a physical activity guide that included free or low-cost fitness opportunities, which facilitated patient referrals directly to existing community programs. The initiative also features free online videos and brochures illustrating how to perform strength exercises properly so people can feel empowered to transform their habits. This effort is possible due to partnerships on the national level, with local FQHCs, faith nurses, and physical activity outlets such as parks and recreation programs. This work will continue as the Healthiest Cities & Counties Challenge progresses, with the goal of increasing the number of medical facilities trained in writing exercise prescriptions and providing up-to-date information to patients about physical activity opportunities in the county. Exercise is Medicine represents a successful model of community-clinical linkages to target health disparities and influence health behavior.

Project Outlook

CHA will continue to strive to exceed state and national standards for health promotion and disease prevention through community collaboration. For the Healthiest Cities & Counties Challenge, CHA will work with local organizations to expand the healthy corner stores initiative to new locations, build on efforts to adapt market vendors’ SNAP/EBT policies, create new joint use agreements, and promote the Exercise is Medicine program. Innovative and effective strategies will also be developed and provided to community members with the aid of diverse sector partnerships and community-clinical linkages. In Cabarrus County, the Cabarrus Health Alliance will continue to promote holistic, sustainable models for population health, and limit access disparities while fostering environments that support happy, healthy, and productive communities.

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References

1. About the Challenge. Healthiest Cities & Counties Challenge. Healthiest Cities website. http://www.healthiestcities.org/about-the-challenge. Accessed March 29, 2017.
2. Why Healthy Cities and Counties? Healthiest Cities & Counties Challenge. Healthiest Cities website. http://www.healthiestcities.org/why-healthy-cities-and-counties. Accessed April 5, 2017.
3. Behavioral Risk Factor Surveillance System. 2015 BRFSS Survey Results: Local Health Director Region 4 Demographics: Fruits and Vegetables: Consumed fruits or vegetables or beans five or more times per day. North Carolina State Center for Health Statistics website. http://www.schs.state.nc.us/data/brfss/2015/region4/DAILY_5.html. Accessed April 6, 2017.
4. Behavioral Risk Factor Surveillance System. 2015 BRFSS Survey Results: Local Health Director Region 4 Demographics: Exercise: Adults that participated in 150 minutes (or vigorous equivalent minutes) of physical activity per week (CDC calculated variable). North Carolina State Center for Health Statistics website. http://www.schs.state.nc.us/data/brfss/2015/region4/_PA150R2.html. Accessed April 6, 2017.
5. What is Exercise is Medicine? Exercise is Medicine website. http://www.exerciseismedicine.org/support_page.php/about/. Accessed April 11, 2017.