The Cabarrus Health Alliance's Healthy Lives, Healthy Futures Program

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Created in 1997 as a successor to the Cabarrus County Health Department, the Cabarrus Health Alliance (CHA) is a model public health department that provides preventive health care services and programming for individuals in Cabarrus County and surrounding areas. CHA clinical services include the Special Supplemental Nutrition Program for Women, Infants, and Children (WIC), women's health care, family planning, immunizations, pediatric care, and dental care. In addition to offering clinical services, CHA also focuses much of its effort in the community on prevention programs that address areas such as teenage pregnancy, heart disease and stroke, obesity, tobacco use, diabetes, and dental health. CHA believes that population health needs are best addressed by local partnerships; thus its stated mission is to achieve "the highest level of individual and community health through collaborative action" [1].

CHA received a 7-year grant from the Kate B. Reynolds Charitable Trust in 2008 to implement the Healthy Lives, Healthy Futures (HLHF) program in partnership with the Cabarrus County Department of Aging, the Faith Community Health Ministry in the greater Charlotte area (which is affiliated with Carolinas HealthCare System), and CHA's regional Heart Disease and Stroke Prevention Program. HLHF is a faith-based program that trains volunteers from various congregations to lead safe and effective exercise classes at their respective churches at no charge. The goal is to reduce the risk of chronic diseases such as diabetes, heart disease, and stroke among underserved residents of Cabarrus, Mecklenburg, and Rowan counties who are living at or below 200% of the federal poverty guidelines. Recently, in recognition of its successful, community-based work, HLHF was 1 of only 47 organizations in the nation to receive a 2012 Community Leadership Award from the President's Council on Fitness, Sports, and Nutrition.

North Carolina's second and fourth leading causes of death are heart disease and stroke, respectively [2], both of which are largely preventable. Self-reported data from the Behavioral Risk Factor Surveillance System in indicate that in 2010, 27.3% of North Carolina residents were not getting the recommended amount of physical activity [3], 79.3% were not eating the recommended number of fruits and vegetables per day [4], and 66.5% were overweight or obese [5], all of which are modifiable risk factors for heart disease and stroke. In addition, in North Carolina the incidence of and/or mortality rate from many chronic diseases, including high blood pressure, diabetes, heart disease, stroke, and some types of cancer, is higher among African Americans than among whites [6]. These data support the need for programs like HLHF, because most North Carolinians are not practicing healthy habits to reduce their risk of chronic diseases such as heart disease and stroke.

The HLHF program's uniquely effective approach has 3 key elements. Its community- and faith-based train-the-trainer program for lay community health advocates, which teaches them to lead weekly exercise classes at their churches, has already been mentioned. In addition, HLHF staff members lead behavioral modification and general nutrition education classes at HLHF churches, and HLHF establishes peer-to-peer support systems to encourage and facilitate long-term behavior change.

Currently, the HLHF program has 19 church sites in Cabarrus, Mecklenburg, and Rowan Counties. These provide 25 weekly exercise classes, such as yoga, kickboxing, strength training, and aerobics classes. In addition, as part

TABLE 1.
National Goals for Improving Adherence to Best Practices for the Treatment of Cardiovascular Disease

Clinical indicator	Percentage of patients in adherence in 2011	Goal for percentage of patients that will be in adherence in 2017
Appropriate use of daily aspirin by patients at high risk of a cardiac event	47%	65%
Adequate control of blood pressure	46%	65%
Effective management of high LDL serum cholesterol level	33%	65%
Refraining from smoking	81%	83%

Source: Information from [7].

diseases. The national smoking rate is 19%, and only 23% of individuals seeking to quit receive support and services, so there is a need for community interventions to address tobacco dependence [9].

The CDC campaign is implemented, in part, through the awarding of Community Transformation Grants made available by the Affordable Care Act. These grants have 3 objectives: to improve health, to reduce disparities across populations, and to control spending through a sound investment in continued health. To date, more than $103 million in federal monies has been awarded to 61 recipient organizations nationwide [10]. North Carolina, through its Division of Public Health, is one of 10 states to receive an implementation grant to address chronic disease statewide. The first phase of this 3-year award (amounting to nearly $7.5 million) focuses on the defense of the 2009 law banning smoking in restaurants and bars and on the implementation of local ordinances promoting tobacco-free public places and worksites [11].

of the grant evaluation process, every 6 months individuals enrolled in exercise classes receive a comprehensive physical assessment completed by a trained exercise professional. Physical assessments include blood pressure measurement, calculation of body mass index, body fat measurement, and circumference measurements, as well as tests of muscular strength, endurance, and flexibility. Participants also complete a self-report health behavior survey to measure fruit and vegetable consumption and total weekly minutes of physical activity.

In addition to the free exercise classes led by volunteers and the nutrition classes facilitated by HLHF staff, HLHF offers program participants the opportunity to engage in motivational programs, such as "The Biggest Loser" contest. In January 2012, 8 churches enrolled 140 church members to participate in a church-to-church challenge. Participants collectively lost a total of 650 pounds. The top 3 churches were awarded funds to be used for their Health and Wellness Ministry activities, and the top 5 individual winners earned gift cards. Participant testimonials illustrate the true success of the Biggest Loser Challenge and the HLHF program. One member said, "Our church lost well over 293 pounds, and so many people were able to lower their medication intake and just feel better. I have people who are ready to do it again. This is an amazing program!"

To date, almost half (41%) of program participants have reported eating more fruits and vegetables, and 66% have increased the amount of exercise they perform each week. In addition, more than half of participants have reduced their waist circumference and/or have lost weight. By reaching participants in a setting they trust and providing them with support and tangible resources, the HLHF program has institutionalized healthy behaviors and practices throughout the community that would otherwise have been difficult to achieve. This is a truly collaborative effort that has demonstrated tremendous success over the past 5 years. NCMJ

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Reference

1. Our mission statement. Cabarrus Health Alliance Web site. http://www.cabarrushealth.org/. Accessed August 31, 2012.
2. Leading Causes of Death. Raleigh, NC: North Carolina Department of Health and Human Services; 2012. http://www.schs.state.nc.us/schs/deaths/lcd/2010/pdf/Vol2_2010_PRT.pdf. Accessed October 10, 2012.
3. North Carolina State Center for Health Statistics. 2010 BRFSS Survey results: Cabarrus County, exercise. North Carolina State Center for Health Statistics Web site. http://www.schs.state.nc.us/SCHS/brfss/2010/caba/exerany2.html. Accessed October 17, 2012.
4. North Carolina State Center for Health Statistics. 2010 BRFSS Survey results: Cabarrus County, fruits and vegetables. North Carolina State Center for Health Statistics Web site. http://www.schs.state.nc.us/SCHS/brfss/2009/caba/_frtindx.html. Accessed October 17, 2012.
5. North Carolina State Center for Health Statistics. 2010 BRFSS Survey results: Cabarrus County, adults who have a body mass index greater than 25.00 (overweight or obese). North Carolina State Center for Health Statistics Web site. http://www.schs.state.nc.us/SCHS/brfss/2010/caba/rf2.html. Accessed October 17, 2012.
6. North Carolina State Center for Health Statistics and Office of Minority Health and Health Disparities. North Carolina Minority Health Facts: African Americans. July 2010. http://www.schs.state.nc.us/schs/pdf/AfricanAmer_FS_WEB_080210.pdf. Accessed October 17, 2012.

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Other important grant recipients whose national networks will target and enrich the North Carolina ABCS campaign include the American Public Health Association and the Community Anti-Drug Coalitions of America, both of which are charged with developing and distributing training materials and strategies for promoting tobacco-free living, and the American Lung Association and the YMCA, which will accelerate the dissemination of outreach materials and messages to underserved, rural, and other target populations.

Conclusion

The Million Hearts initiative constitutes a concerted and comprehensive approach to addressing a national health epidemic. It is unique in both its comprehensive approach and its intentional alignment of payment for preventive interventions. Its aggressive and targeted use of proven clinical and community-based interventions demonstrates the shared role of clinical medicine and public health in addressing this challenge. Moreover, it provides the funding and mandate necessary to finance that integration of clinical medicine and public health, promoting the improvement of both individualized clinical care and population-based management of chronic disease. After decades of research, we have learned much about the causes and prevention of cardiovascular disease. Million Hearts will apply these lessons to save lives. NCMJ

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