

Ohio Project Narrative

BACKGROUND

This application from the Ohio Department of Health (ODH) Bureau of Healthy Ohio (BHO) to the Centers for Disease Control and Prevention (CDC) is for *State and Local Public Health Actions to Prevent Obesity, Diabetes, and Heart Disease and Stroke (1422)* – financed solely by 2014 Prevention and Public Health Funds. Ohio has a rich history of working in diabetes and heart disease and stroke and was funded through cooperative agreements with the CDC's Diabetes Prevention and Control Program and Heart Disease and Stroke Prevention Program for 13 years and 11 years, respectively.

Ohio is currently funded under the CDC's *State Public Health Actions to Prevent and Control Diabetes, Heart Disease, Obesity and Associated Risk Factors and Promote School Health (1305)* Basic grant, Preventive Health and Health Services Block Grant (PHHSBG), the [ASTHO Million Hearts™](#) Hypertension (HTN) Collaborative, and the Ohio Coverdell Stroke Program to carry out public health functions and implement evidence-based strategies to prevent and reduce obesity, diabetes, and heart disease and stroke. Funded by the PHHSBG, the [Creating Healthy Communities](#) (CHC) Program at ODH implements sustainable practices to prevent chronic disease in Ohio's most vulnerable communities serving five million Ohioans. CHC is building capacity in 16 high-need rural and urban counties in multiple sectors (communities, schools, worksites, and faith-based institutions) to make the healthy choice the easy choice. CHC works with communities to implement evidence-based interventions that increase opportunities for physical activity, improve access to and affordability of healthy foods and beverages, and ensure tobacco-free living. This program has proven outcomes, and will serve as a model to enhance and expand community-based activities implemented in the 1422 grant.

APPROACH

Problem Statement

Ohio is the seventh most populous state in the nation, with 11.6 million residents living in 88 urban, suburban, rural and Appalachian counties. Ohio ranks 40th for health in the country and ranks among the worst for rates of obesity (38th), diabetes (45th) and cardiovascular deaths (37th). The estimated economic impact of chronic disease in Ohio is nearly \$57 billion per year.

In 2012, chronic diseases (heart disease, cancer, chronic lower respiratory disease, stroke, diabetes and kidney disease) accounted for 62 percent (112,418) of all Ohio deaths. Ohio adults (age 18 and older) had a higher estimated prevalence of coronary heart disease (5.4 percent), stroke (3.1 percent), hypertension (HTN) (32.7 percent, 2011 data), diabetes (11.7 percent) and cancer (6.6 percent) compared to the U.S. median. In addition, 6.3 percent of Ohio adults had been diagnosed with prediabetes and up to 12 percent of all pregnancies were complicated by gestational diabetes mellitus (GDM), conditions that increase the risk of developing type 2 diabetes later in life. Control of clinical risk factors associated with chronic disease is paramount to preventing long-term consequences. Yet, only 65.4 percent of Ohio adults with clinically diagnosed HTN have achieved blood pressure control, and only 72.6 percent of diabetic adults are in control of their diabetes.

Ohio also has a higher prevalence of risk factors associated with chronic disease compared to the United States. In 2012, 65.3 percent of Ohio adults were estimated to be

overweight or obese; 25.3 percent did not participate in any physical activities in the past month; 79.0 percent consumed fruits and vegetables less than five times per day (2009 data); and 23.3 percent were current smokers. Obesity and related lifestyle behaviors are associated with an increased risk for many chronic diseases, including coronary heart disease, stroke, type 2 diabetes and certain cancers.

While all Ohioans are at risk of developing chronic disease, certain populations are disproportionately affected. Similar to national trends, rates of heart disease, stroke, HTN and diabetes in Ohio are higher among blacks, residents of Appalachian/rural counties, those with the lowest income and education and those who are disabled. Similarly, disparities in associated health behaviors (lack of physical activity, insufficient fruit and vegetable consumption and overweight/obesity) exist among these same populations. 1422 funding will be used to target high-need and disparate communities in counties with substantial population size in an effort to maximize program effectiveness and achieve desired outcomes at the community and state level.

Purpose

This project will enhance existing capacity and build leadership at the state and community level to implement and evaluate evidence-based, data-driven approaches to improve obesity, diabetes, and heart disease and stroke outcomes and reduce disparities. ODH will coordinate state and local strategies to establish policies, systems and environments that increase opportunities for physical activity and access to healthy foods; to improve access to high-quality team-based care utilizing electronic health data and quality improvement strategies; to integrate health care data and public health surveillance data; and to utilize health care extenders to expand access to lifestyle change programs. ODH will accomplish this by engaging key partners at the state and local level, and providing funding, technical assistance and resources to the selected high-need communities to implement strategies in Components 1 and 2.

Outcomes

This project will maximize statewide impact by implementing strategies within both Components in the selected high-need communities. The following outcomes are expected to be achieved by September 2018: increased consumption of nutritious food and beverages and increased physical activity; increased engagement in lifestyle change programs; improved medication adherence for adults with high blood pressure (HBP); increased self-monitoring of HBP tied to clinical support; and increased availability of, referrals to and enrollments in lifestyle change programs to prevent diabetes among persons with prediabetes and those at high risk for type 2 diabetes.

Strategy and Activities

The activities chosen for this project are evidence-based (e.g., *The Guide to Community Preventive Services*; *National Physical Activity Plan*; *2008 Physical Activity Guidelines for Americans*; Million Hearts™; Institute of Medicine *Accelerating Progress in Obesity Prevention*; Robert Wood Johnson Foundation *Action Strategies Toolkit*; and *A Practitioner's Guide for Advancing Health Equity: Community Strategies for Preventing Chronic Disease*) and reflect the framework of the Health Impact Pyramid and the Expanded Chronic Care Model. The 1422 project will build upon current chronic disease and health promotion state priorities, leverage existing partnerships, and address identified gaps to improve health outcomes.

Activities also align with the recently released [Ohio's Plan to Prevent and Reduce Chronic Disease: 2014-2018](#) (CD Plan). The CD Plan is framed on the CDC's four-domain paradigm for a coordinated approach to chronic disease prevention and health promotion, and is being implemented by the Ohio Chronic Disease Collaborative (OCDC), of which ODH is a key leader and facilitator. This application builds on the CD Plan to achieve greater public health impact in the prevention of obesity, diabetes, and heart disease and stroke among adults using: (1) environmental and system approaches to promote health, support and reinforce healthful behaviors and build support for lifestyle improvements; and (2) health system interventions and community-clinical linkages to improve the quality of health care among high-need populations and support diabetes, heart disease and stroke prevention efforts. The CD Plan outlines a comprehensive framework to improve population health and includes 11 objectives that directly support the strategies and activities included in this proposal. Listed in Table 1 are objectives that align with this proposal and illustrate Ohio's commitment to leverage resources at the state and local level to support healthy communities and reduce health disparities.

Table 1: Ohio's Plan to Prevent and Reduce Chronic Disease: 2014-2018 (selected objectives)	
1.6	By 2018, increase the number of Ohio communities that adopt Complete Streets policies.
1.7	By 2018, increase the number of Shared-Use Policies and Agreements between schools, communities, parks and recreation, and other groups to increase physical activity opportunities in the community.
1.8	By 2018, increase the number of public and private worksites in Ohio that meet Healthy Ohio Business Council recognized worksite wellness criteria.
1.12	By 2018, increase the percentage of census tracts that have at least one healthy retail option located within the tract or within half a mile of tract boundaries.
1.15	By 2018, establish a statewide food council network to help create a supportive Ohio food system.
2.4	By 2018, establish use of the <i>Check it. Change it. Control it. Your Heart Depends On It.</i> Toolkit in primary care centers in Ohio.
2.5	By 2018, develop an Ohio-based, online, practice engagement platform to expand access to quality improvement tools to family medicine providers to improve prevention, risk factor identification, and management of chronic disease.
3.1	By 2018, develop recommendations for evidence-based chronic disease and diabetes self-management education programs that include essential program elements, desired outcomes, evaluation methods, quality assurance, cost guidelines, and reimbursement methods.
3.2	By 2018, increase the percent of people with prediabetes enrolled in CDC-recognized lifestyle change programs.
3.3	By 2018, increase the number of community health worker models being used to address chronic disease prevention and management.
4.3	By 2018, pilot and disseminate results from at least one project combining electronic health records and other health system data with population health surveillance data

to identify, assess and monitor populations with high chronic disease burden.

This project will complement but not duplicate 1305 and PHHSBG funded activities. Settings include communities, health care and worksites. (See page 19 for a detailed work plan). The following description of the work plan aligns with the logic model on page 18 and addresses all the required strategies, performance measures and outcomes. ODH will connect fragmented public health and health system interventions through a coordinated chronic disease and health promotion approach using primary prevention to increase physical activity and nutrition, and secondary prevention to integrate public health and primary care and strengthen community-clinical linkages.

Component 1: Environmental strategies to promote health and support and reinforce healthful behaviors

Strategy 1—Implement food and beverage guidelines including sodium standards: Over the past year, the CHC program collaborated with the Ohio Hospital Association (OHA) Foundation for Healthy Communities, Ohio Alliance of YMCA’s, and Columbus Public Health to develop a healthy vending initiative titled Good4You, which also includes a [Water First for Thirst](#) healthy beverage campaign. For the purposes of this grant, ODH and 1422 subawardees will work with OHA’s Foundation for Healthy Communities to implement Good4You nutrition standards and Water First for Thirst beverage policies with hospitals statewide and in funded communities through an established network of hospital-based wellness coordinators. ODH and 1422 subawardees will also work with local YMCA branches, libraries, parks and recreation departments, and/or city and county buildings to implement healthy food and beverage guidelines. Finally, ODH will join [The Ohio Consortium for Building Healthy Academic Communities](#), led by The Ohio State University (OSU), to implement food and beverage guidelines and tobacco-free campus policies in university settings in Ohio.

Strategy 2—Strengthen healthier food access and sales: CHC has been implementing healthy corner store initiatives around the state for the past three years, including bringing in national experts from ChangeLab Solutions to provide training to CHC counties and other statewide partners. ODH will take lessons learned from these established healthy corner stores to work with 1422 subawardees to implement healthy corner store initiatives in additional priority areas. ODH will provide marketing materials, such as shelf tags and cooler signage, to retail venues. These retail venues will promote healthy foods and beverages through an Ohio healthy corner store “brand” currently being developed by [Better World Advertising](#). Behavioral economic strategies, such as product placement, branded materials and point-of-purchase marketing, will be used to encourage sales of healthy foods and beverages. In addition to healthy corner stores, there is a need in Ohio for full service grocery stores in areas designated as food deserts. Therefore, ODH will expand its work with state partners, such as [The Finance Fund](#), to increase healthy food financing opportunities in Ohio. In addition to working with healthy retail, local 1422 subawards will work in community venues to implement Client Choice Food Pantries in high-need areas to empower participants to select healthier foods. Using similar behavioral economic techniques as in corner stores, 1422 subawardees will work with larger retail venues on instituting healthy checkout lanes, specifically working with retailers to transform one or more checkout lanes to include only healthy food options and toys that

promote physical activity. ODH will also develop relationships with regional foodbanks and create an action plan to develop a “[Healthy Food Bank Hub](#)” in communities not currently funded by CHC to ensure that efforts are not duplicated. A contract with The Food Trust will be used to provide additional training and technical assistance on expanding healthy retail strategies into larger grocery and supermarket stores, to address specific gaps identified in The Food Trust’s Special Report, [Food for Every Child, The Need for Healthy Food Financing in Ohio](#).

Strategy 3—Strengthen community promotion of physical activity: This strategy includes activities to increase physical activity opportunities where adults live, work and play. At the state level, ODH will partner with [Health Policy Institute of Ohio](#) (HPIO), who is leading an effort to leverage hospital community benefit requirements through the Affordable Care Act to support physical activity and healthy eating through joint use agreements. Locally, 1422 subawardees will work with the Safe Routes to School (SRTS) National Partnership—Ohio Network to implement joint use agreements between school districts and their respective cities/counties in order to expand physical activity opportunities to adults in the community. Community venues such as faith-based organizations will also be approached to adopt joint use agreements. Building on established joint use agreements, 1422 subawardees will use social support to engage community members in physical activity opportunities (e.g., [art walks](#), [Walk with a Doc](#), free fitness classes at parks or farmers’ markets, and other point of decision signage to promote walking in parks). In worksites, ODH will promote active commute policies and environments for state agencies, including covered bike racks and access to shower facilities. Additionally, ODH will conduct trainings with worksites using CDC’s [Work@Health™](#) and *Steps to Wellness Guide*, which include establishing active commute policies and promoting point of decision prompts for stair usage. These trainings will be delivered regionally through the Healthy Ohio Business Council (HOBC), an established network of employer partners created by ODH in 2002. The CDC Worksite Health Scorecard will be used to assess pre- and post-worksite wellness programs among training participants.

Strategy 4—Develop and implement transportation and community plans that promote walking: ODH will focus on increasing physical activity opportunities through built environment improvements that support active transportation and healthy community design. Technical assistance will be provided to 1422 subawardees on how to establish local partnerships with transportation, housing, and planning sectors. ODH and 1422 subawardees will work with local municipal planning organizations, SRTS and city/county planning departments to adopt and implement Complete Streets policies and include bike and pedestrian infrastructure into master transportation plans. A contract with Smart Growth America will be used to provide additional training and technical assistance to 1422 subawardees and other partners specific to development and implementation of transportation plans that include walking.

Component 1: Strategies to Build Support for Lifestyle Change

Strategy 5—Plan and execute strategic data driven actions: Activities in this strategy focus on establishing and convening a network of partners around lifestyle change. This Lifestyle Change Network (LCN) will involve interested stakeholders, including state health and human services agencies (e.g., health, aging, mental health and addiction), public and private insurance companies, Area Agencies on Aging (AAA), CDC-recognized Diabetes Prevention Programs (DPP), parks and recreation and others. The LCN will develop a plan to expand availability of lifestyle change programs and increase referrals by and linkages to health care

providers. An assessment of the functionality of the LCN will be completed to determine its effectiveness using “Coalitions Work!” tools. Using this LCN plan, community stakeholders and partners (e.g., local public health, providers, and community-based organizations) will be identified by each of the 1422 subawardees to connect lifestyle change programs to healthcare systems and engage community members. 1422 subawardees will promote awareness of and enrollment in DPP through insurance companies, AAAs, parks and recreation, senior centers, and faith-based organizations.

Strategy 6—Implement evidence-based engagement strategies: ODH will work with Healthways, the wellness program provider for state employees, to develop targeted communications to individuals identified with prediabetes or at risk for type 2 diabetes to direct them to DPP. The state will engage other employee benefit providers to develop similar communications to high-risk employees, including use of social media. The 1422 subawardees will also work with benefit providers in their respective communities to establish a targeted and tailored communication plan for employers to direct their employees with prediabetes to DPPs. The Social Marketing Consultant will provide technical assistance on utilization of evidence-based engagement strategies to enroll priority populations in DPP using social marketing principles and tools.

Strategy 7—Increase coverage for evidence-based supports for lifestyle change: This strategy is focused on educating employers and wellness professionals using the HOBC regional networks about the benefits of covering DPP through health insurance plans. 1422 subawardees will recruit employers to participate in education provided by HOBC regional networks about the return on investment of including DPP as a covered benefit. In addition, approximately 22,000 state employees have coverage for DPP through UnitedHealthcare. ODH will work with the Ohio Department of Administrative Services (DAS) to establish coverage for the remaining state employees (20,000+) who are insured by Medical Mutual, but who currently do not have coverage for DPP. The LCN also will provide support to gain and/or expand coverage for DPP for non-Medicare Ohio Public Employees Retirement System members.

Component 2: Health System Interventions to Improve the Quality of Health Care Delivery

Strategy 1—Increase electronic health records (EHR) adoption/use of health information technology (HIT): CliniSync/Ohio Health Information Partnership and HealthBridge, Ohio’s Health Information Exchanges (HIE), are currently developing Public Health Meaningful Use reports for ODH on syndromic surveillance, immunization and cancer data. BHO staff supported by 1422 will join the ODH Meaningful Use Group to promote the value of including standard blood pressure quality measures collected from participating healthcare providers in the reports. In order to assess the resources and needs in 1422 subaward communities related to health system interventions and developing/enhancing community-clinical linkages, ODH will develop and conduct an Ohio Health Systems Survey (OHSS) to collect data from health systems and providers relevant to strategies in Component 2. Results of the survey will be used to assist partners and 1422 subawardees in engaging primary care practices in quality improvement initiatives for the identification and management of HBP and prediabetes.

The successful Summit County, Ohio, ASTHO Million Hearts™ HTN Collaborative model will be expanded to establish HTN Collaboratives with Patient-Centered Medical Homes (PCMH) and other primary care practices in 1422 subaward communities. (For more details on the

ASTHO Million Hearts™ HTN Collaborative see page 15). ODH will provide training and technical assistance to these collaboratives to increase the use of EHRs, patient registries, practice improvement strategies and protocols, and team-based care to improve the identification of undiagnosed HBP, and treatment and management of patients diagnosed with HBP.

Strategy 2—Increase institutionalization and provider monitoring of quality measures: ODH will promote clinical innovations in blood pressure control in partnership with Ohio Academy of Family Physicians (OAFP) by providing training and technical assistance to participating HTN Collaborative practices in 1422 subaward communities. This training will include cultural sensitivity and the use of the newly developed *Check it. Change it. Control it. Your Heart Depends on It*. Toolkit (Toolkit) and a smartphone app for African-American men and women. Toolkit implementation will be addressed in a “Team Training Day” to be held for 1422 subaward HTN Collaboratives. HBP data will be collected from the HTN Collaboratives using an online, interactive Practice Improvement Program (PIP) dashboard that will be available statewide through the OAFP website. The dashboard will house quality improvement opportunities for providers to address health behaviors, and medication management and adherence. It will contain tools and metrics to measure interventions and practice change effectiveness related to HBP in participating 1422 HTN Collaborative practices. Practices enrolled in the HTN Collaboratives will be encouraged to complete National Committee for Quality Assurance (NCQA) Diabetes and Heart/Stroke certifications.

Strategy 3—Increase engagement of non-physician team members: Ohio has a large contingent of Community Health Workers (CHW) and six Board of Nursing-Approved CHW Training Programs. However, their work is focused primarily on maternal and child health issues and infant mortality reduction. To better inform activities for this strategy, OHSS data will be analyzed and used to identify where CHWs are employed in 1422 subaward communities, their experience with chronic disease management, and their level of integration into the healthcare team. ODH will convene representatives from the Ohio Community Health Workers Association (OCHWA) and CHW Training Programs to assess curriculums currently in place; identify gaps and training needed in HBP and diabetes management for existing and new CHWs; and address reimbursement and sustainability issues for CHWs working in community healthcare systems. Based on this assessment, a sustainability plan will be developed with recommendations to build capacity and expertise of CHWs to address HBP in high-risk populations. In collaboration with the CHW training programs, ODH will develop online training modules to integrate CHWs into community-based efforts to prevent and manage HBP and prediabetes/diabetes in 1422 communities.

Strategy 4—Increase use of self-measured blood pressure (SMBP) monitoring: ODH will add four questions originally published in *Self-Measured Blood Pressure Monitoring: Action Steps for Public Health Practitioners* to the Ohio BRFSS to determine prevalence of SMBP in healthcare settings. ODH will also analyze data from the OHSS to determine policies and systems in place for SMBP in 1422 subaward communities, and assess the status of the five Ohio Medicaid Managed Care plans’ coverage for blood pressure monitors. Findings will be used to develop messages and identify dissemination channels to promote SMBP to providers and patients in 1422 subaward communities to improve blood pressure control.

Strategy 5—Systems to identify undiagnosed HTN/prediabetes: Training provided by OAFP for providers participating in the HTN Collaboratives in each 1422 subaward community

will include strategies to identify patients with undiagnosed HTN and prediabetes. Providers will determine capability of existing EHRs to produce registries of these patients and develop policies/protocols to identify and refer patients to available lifestyle change programs/DPPs. ODH will provide technical assistance to 1422 subaward communities to develop messages and identify dissemination channels to inform providers and patients about available lifestyle change/DPP programs. 1422 subawardees will survey existing DPPs and American Association of Diabetes Educators (AADE)/American Diabetes Association (ADA) programs to determine their interest in becoming CDC-recognized DPPs.

Component 2: Community Clinical Linkage Strategies to Support Heart Disease and Stroke and Diabetes Prevention Efforts

Strategy 6—Increase engagement of CHWs: Using data from OHSS, 1422 subawardees will contact community-based agencies and healthcare systems in their communities that currently employ CHWs to determine the populations served and health issues addressed. Each 1422 community will convene quarterly meetings with practicing CHWs to strengthen relationships, provide resources and training about HBP and prediabetes, establish care coordination and referral processes to existing community resources, and identify opportunities to place CHWs in more agencies/healthcare systems to increase outreach to high-risk populations.

Strategy 7—Increase engagement of community pharmacists/Medication Therapy Management (MTM): The 1422 MTM project will focus on increasing the number of community pharmacists who provide MTM to patients with HBP in each of the 1422 subaward communities. ODH will work with the Ohio Pharmacists Association (OPA) to expand the 1305 Ohio MTM Collaborative, led by The OSU College of Pharmacy, by funding two additional Ohio colleges of pharmacy to train community pharmacists on implementing MTM for HBP and diabetes in 1422 subaward communities. 1422 subawardees will engage and recruit local pharmacists to participate in the MTM training and implementation.

Strategy 8—Implement systems to facilitate bi-directional referral systems: ODH will provide technical assistance to 1422 subaward communities to incorporate referrals to lifestyle management programs, Diabetes Self-Management Education (DSME) and DPPs utilizing Ohio's extensive 2-1-1 system which currently operates in 60 counties and covers 90 percent of Ohio's population. The 1422 subawardees will establish care coordination protocols using the bi-directional 2-1-1 system for referral of patients to lifestyle change programs. ODH will use social marketing strategies to identify messages and effective dissemination channels to increase awareness of prediabetes among providers and the population.

Component 1, Years 2-4: To increase consumption of fruits, vegetables and healthy beverages, the number of retail and community sites will be expanded. Lessons learned from working in small retail venues such as corner stores in year 1 will be used to expand work into larger venues such as grocery and supermarket chains in the following years to increase the number of consumers impacted. The number and scope of joint use agreements, transportation plans, and worksite wellness policies will be expanded to increase the number of Ohio adults who meet physical activity guidelines.

To strengthen the promotion of physical activity to the worksite population, the CDC Work@Health™ model will be expanded to additional worksites in 1422 subaward communities, and trained worksites will be encouraged to apply for a Healthy Ohio Healthy

Worksite Award. ODH will continue to collaborate with the statewide network of CDC-recognized DPPs to increase the number of referrals of people at risk for pre-diabetes and development of type 2 diabetes. Subsequent years will focus on expanding coverage for DPPs in non-worksite venues (e.g., Federally Qualified Health Centers (FQHC) and low-income seniors enrolled in the Ohio PASSPORT Medicaid Waiver Program), and demonstrating the cost benefit of DPP participation.

Component 2, Years 2-4: Strategies will include increasing the number of HTN Collaborative practices in 1422 communities that use EHRs effectively to manage undiagnosed/diagnosed HBP; engaging more practices in HBP management among African-Americans; increasing use of SMBP; increasing the number of CHW training programs that include HBP/prediabetes/diabetes management; expanding MTM to more community pharmacies and piloting a project to electronically link pharmacists to providers with EHRs; increasing the number of agencies/healthcare systems that employ CHWs to address HBP/prediabetes/diabetes; increasing the number of CDC-recognized DPPs in each 1422 subaward community; and expanding the use of community referral systems that include information and resources about DPP.

Epidemiology and surveillance will be enhanced to support the collection, analysis and dissemination of measures to inform, monitor and evaluate the proposed strategies and activities across Components 1 and 2. Data necessary for successful evaluation of short- and intermediate-term performance measures in years 2-4 will be collected through the Ohio BRFSS, 1422 HTN Collaborative reports, HIE Meaningful Use Stage 1 and 2 core measures reports, and the OHSS.

Collaborations

Existing partnerships to strengthen chronic disease prevention and control in Ohio include the OCDC (with more than 70 members across five sectors); an interagency agreement (IAA) with Medicaid; Memoranda of Understanding (MOU) with OHA and ODA; and additional traditional and non-traditional partners from other government agencies, healthcare systems, non-profits, transportation, planning/zoning, faith-based and food access organizations. The ODH IAA with Medicaid allows for data sharing between agencies to meet programmatic needs. In healthy eating and active living sectors, ODH has established relationships with OHA Foundation for Healthy Communities, SRTS, HOBC, HPIO, Ohio Alliance of YMCA's, Community Transformation Grant recipients, Pioneering Healthier Communities, and ACHIEVE Communities across the state. Component 2 partners include OCHWA, OAFP, The OSU College of Pharmacy, Ohio QIN and OPA. Letters of support from many of these partners can be found in Attachment A.

Target Populations

This project focuses on high-risk communities that have insufficient infrastructure to support healthy living, and inadequate systems and resources to address HBP, prediabetes and diabetes. ODH will fund a mix of large urban counties and high-need Appalachian communities to ensure racial, ethnic and geographic diversity. Building local public health infrastructure through this project will ensure sustainability of strategies to prevent and reduce chronic disease. Specific priority populations addressed include adults in rural and Appalachian communities with low socioeconomic status and low educational attainment and urban communities with high populations of blacks and Hispanics, and high rates of poverty. These

populations are at disproportionately higher risk for uncontrolled HBP and diabetes and have the greatest burden of heart disease, stroke and diabetes among all Ohioans.

Subaward Selection: ODH will allocate at least 50 percent of project funds to provide up to eight 1422 subawards to communities meeting the eligibility criteria specified below. Upon receipt of 1422 funds, ODH will release a competitive request for proposals (RFP) for the subawards. Local health departments (LHD) will be given priority in the 1422 subawards. However, non-profit organizations may apply, but must partner with LHDs and obtain a letter of support from them. To determine community eligibility, county-level data were collected and analyzed for the following measures: population size; percentage of black/Hispanic population; percent below the poverty level; percent with less than high school education; access to care rank; quality of care rank; diabetes prevalence; obesity prevalence; HTN prevalence; heart disease mortality rate; and stroke mortality rate. Due to the high correlation between race/ethnicity and poverty level with the other measures examined, the following eligibility criteria were selected for the 1422 subawards:

County subawards: Six to seven subawards will be funded to individual counties with a population of 100,000 or more, and (1) a combined black and Hispanic population of 10 percent or more, and/or (2) a poverty level of 18 percent or more (10 percent higher than the state rate). Using these criteria, 13 of Ohio's 88 counties, with a combined population of more than six million, would be eligible to apply in this category.

Multiple-county subawards: One to two subawards will be funded to a group of contiguous counties in Appalachian Ohio with a combined population of 100,000 or more, one county of which must have a poverty level of 18 percent or more. Counties in this category, which are predominantly rural, white and not densely populated, exhibit significant health disparities and have some of the worst poverty, access to care and chronic disease mortality rates in the state.

Proposals meeting these eligibility criteria will be scored based on the following: (1) demonstration of high need and health disparities, based on socioeconomic, access to care, chronic disease and risk factor data; (2) reach (number of people impacted); (3) infrastructure to fully implement component-specific strategies, including staffing; (4) prior experience working with priority populations for the specified strategies; and (5) established partnerships with relevant organizations and key stakeholders. Selected communities will be required to work on all strategies in both Components 1 and 2; submit a one-year work plan that includes activities, performance measures, data sources, persons responsible and timeframes; hire a full-time project coordinator and additional staff as necessary to fully implement both components of this award; and report on identified process and outcome performance measures using a standardized spreadsheet that will be provided to all selected communities. Applications will be reviewed and scored by ODH BHO program staff and external reviewers.

Inclusion

Specific populations who can benefit from 1422 will include adults who are non-English speaking and those with disabilities and limited health literacy who are overweight/obese and/or at high risk of diabetes, heart disease, and stroke. ODH will provide cultural sensitivity training (e.g., language, sexual orientation) to 1422 subawardees and partners, and utilize social marketing techniques to develop appropriate messaging for these populations.

APPLICANT EVALUATION AND PERFORMANCE MEASUREMENT PLAN

ODH has established internal evaluation capacity to inform, prioritize and monitor the strategies, activities and outcomes described in this proposal. The Chronic Disease Epidemiology and Evaluation Manager and the 1422 Chronic Disease Epidemiologist will report on all short-term and intermediate outcome measures; assist in the development of a comprehensive evaluation and performance management plan (Evaluation Plan) within the first six months of the project; serve as liaisons to an external evaluation contractor; and participate in national evaluation efforts that will contribute to the evidence base of strategies to prevent obesity, diabetes, heart disease and stroke. To enhance internal evaluation capacity, an evaluation RFP is under development and will be released upon receipt of funds to select an external independent evaluator to monitor and assess program performance and lead development of the Evaluation Plan. A 1422 evaluation team will also be established that includes the internal epidemiology and evaluation staff described above, the external evaluator and other key project staff members.

The CDC evaluation framework will be used to guide development and implementation of the Evaluation Plan. ODH will engage both internal stakeholders (e.g., ODH senior leadership, BHO chief, BHO managers and staff, other ODH programs), and external stakeholders (e.g., local public health, health care, business, transportation, state and local government) to: (1) enhance collaboration and synergies between agencies, organizations and programs with similar objectives and strategies; (2) identify how best to leverage funds to maximize efforts; and (3) identify and provide data to monitor and evaluate progress. Internal stakeholders will be engaged during meetings with ODH leadership, BHO managers, BHO staff and relevant ODH programs. External stakeholders will be engaged through ODCDC meetings, other relevant statewide coalition/collaborative meetings (e.g., Tobacco Free Ohio Alliance), LHD weekly calls and the BHO website.

Two types of evaluations will be included in the Evaluation Plan: (1) process evaluation to demonstrate progress in strategy implementation, focusing on target populations, partnerships and activities; and (2) outcome evaluation to monitor short-, intermediate- and long-term outcome measures and inform continuous program and quality improvement. The Evaluation Plan will focus on four key questions to measure the extent to which: (1) environmental strategies improve the prevention of obesity, diabetes and heart disease and stroke; (2) strategies to build support for healthy lifestyles to improve the prevention of obesity, diabetes, and heart disease and stroke; (3) improvements in quality, use and delivery of clinical and prevention services improve HTN management; and (4) increased community-clinical linkages improve the prevention of diabetes, heart disease and stroke through control of HBP.

Quantitative and qualitative process and outcome performance measures will be used to set baselines and targets and monitor progress toward desired outcomes. Process performance measures will be based on the populations targeted, program partners and progress in strategy and activity implementation. Outcome performance measures will be based on the short-, intermediate-, and long-term objectives for each of the two Components presented in the logic model on page 18. Evaluation team members will participate in meetings/conference calls with CDC to assist in refining state-specific performance measures for program monitoring and targeting areas for quality improvement. For measures yet to be

determined, the evaluation team will also work with CDC to identify alternate data sources for performance monitoring.

Measures will be tracked and recorded using a standardized spreadsheet template that will be provided to all 1422 subaward communities. Data will be compiled and analyzed for each community and at the state level on a quarterly basis to measure the progress and reach of each strategy. Component 1 strategies regarding food and beverage guidelines and healthier food access, promotion of physical activity, and implementation of transportation and community walking plans will be measured using data from the subawardee quarterly program reports (SQPR) and BRFSS. Additional measures that will be used for healthy eating and active living strategies include the CDC modified Retail Food Environment Index (mRFEI), USDA Food Atlas, and the Complete Streets Policy Inventory. Support for lifestyle change programs will be measured using SQPRs, LCN assessment results, benefit provider data, and CDC Diabetes Prevention Recognition Program (DPRP) reports. Component 2 strategies addressing quality improvement in health systems will be assessed using data from the Ohio BRFSS, the results of the OHSS, and CDC DPRP reports. In addition to BRFSS, OHSS and DPRP reports, data from OPA and SPQRs will be used to monitor and assess the Component 2 strategies addressing community clinical linkages. In addition, the prevalence of HBP, blood pressure adherence, prediabetes, diabetes and GDM will be analyzed using BRFSS and Medicaid data to assess improvements in these measures among all Ohio adults and disparate populations from baseline (year 1) through the end of year 4.

Evaluation Plan progress and findings will be captured in the Annual Performance Report. This report will be provided to program staff, partners and stakeholders to communicate progress, accomplishments, strengths, weaknesses, recommendations and action steps in an effort to improve the quality and sustainability of the project. Results of this report will be incorporated into the development of future work plans and activities to ensure that the project is effective in meeting intended outcomes. The report will be submitted to CDC as part of the national evaluation effort to increase the knowledge base regarding evidence-based strategies.

ORGANIZATIONAL CAPACITY OF APPLICANTS TO IMPLEMENT THE APPROACH

Organizational Capacity Statement

Management of 1422 will reside in the BHO within the Division of Prevention and Health Promotion (DPHP). BHO currently manages more than 115 contracts and 55 subawards, reaching all 88 counties in Ohio, with a total budget of more than \$25 million. Staff consists of subject matter experts in chronic disease prevention, health promotion, risk factor management, surveillance/epidemiology, evaluation, and fiscal and administrative support. The work of 1422 will span across two BHO sections—Chronic Disease and Primary Prevention. Staff in cross-functional positions such as coordinated chronic disease management, social marketing, surveillance/epidemiology and evaluation will play an integral role in working with subject matter experts from both sections to plan and implement strategies across Components 1 and 2.

ODH will leverage resources and expertise from existing programs funded by the PHHSBG, state general revenue, and other federal sources to coordinate state and local efforts and engage selected communities. This will allow Ohio to increase the scope of activities and expand local infrastructure while minimizing duplication. Reach and impact will be maximized

through sustainable strategies for prevention and reduction of heart disease, stroke, obesity and diabetes.

The ODH Social Marketing Consultant and other ODH staff have expertise using two Nielsen market research software applications—PrimeLocation and ConsumerPoint— to profile priority populations by demographics, lifestyle and purchasing behavior, and to use the information to strategically apply social marketing principles to program planning and implementation. Current chronic disease epidemiology staff received extensive training in Geographic Information Systems (GIS), which will be used to identify areas with high rates of chronic disease, social determinants and other individual indicators of disease and disparities to determine priority populations. ODH will provide community-specific Nielsen and GIS maps and reports to 1422 subawardees to help them effectively plan and implement strategies. GIS mapping and Nielsen data have been used extensively in BHO, as referenced in the [Chronic Disease Map Gallery](#). For example, in 2013, CHC collaborated with the Social Marketing Consultant and epidemiology staff to incorporate Nielsen market research data into GIS maps to identify locations of small food retailers in close proximity to schools, and weekly expenditures for fruits and vegetables to prioritize locations of highest impact for healthy retail interventions in urban and rural counties.

ODH has experience working with high-need populations. For example, the Chronic Disease Section utilized focus group data from physicians and African-American men and women to develop a clinically based and culturally appropriate Toolkit. ODH has extensive experience working in Appalachia as evidenced by more than two decades of funding CHC projects in these communities. ODH will require 1422 subawardees to identify specific group(s) who experience a disproportionate burden of disease or health condition to address health disparities and/or inequities. ODH's BHO, Office of Health Equity, Office of Health and Disability and the State Office of Rural Health will work together to coordinate training and technical assistance for the 1422 subawardees. For example, training will be provided on implementation of strategies to address health equity using the CDC toolkit, [A Practitioner's Guide to Advancing Health Equity: Community Strategies to Prevent Chronic Disease](#).

Readiness to Work on Strategies

Aligning strategies and activities described in this proposal with the CD Plan and the ODH Strategic Plan will ensure coordination with state and local partners, leverage resources, and maximize reach while reducing duplication of effort. ODH and partners will compliment and expand ongoing strategies and activities to maximize reach and impact within high-need populations. Established partnerships with state and local stakeholders through 1305, ASTHO Million Hearts™ HTN Collaborative, PHHSBG, and other programs within the BHO demonstrate readiness to work on strategies. The OCDC, OHA Foundation for Healthy Communities, Ohio Alliance of YMCA's, SRTS Partnership, OAFP, OACHC, OPA, OSU, and Ohio QIN are currently engaged with ODH to implement chronic disease prevention and health promotion strategies and activities relevant to 1422.

Both the CD Plan and the Prevention and Wellness section of the ODH Strategic Plan were developed along the CDC domain framework, creating a cross-cutting set of goals, objectives and strategies to achieve common outcomes. Efforts initiated through the Coordinated Chronic Disease Prevention and Health Promotion Program laid the groundwork for what has been a cultural shift within ODH toward addressing chronic disease with policy,

system and environmental change, strong partnership engagement, strategic communication and synergistic efforts focusing on priority populations with evidence-based interventions.

The infrastructure that CHC has developed and sustained for over two decades will be the model for the 1422 subawards. CHC subawardees are required to develop, sustain and evaluate their coalition; develop and implement an annual work plan; report on progress quarterly; and perform process and outcome evaluation. Ongoing and extensive technical assistance provided by CHC program consultants, through web-based and in-person trainings, has proven to be a key driver in the program's success. In 2010, the CHC program was awarded a CDC PHHSBG Program Delivery Award based on its successful implementation and evaluation.

ODH is the state's primary resource for population-based data collection, analysis and dissemination. Ohio BRFSS, Ohio Adult Tobacco Survey, Ohio mortality and social marketing data among other sources have been used to guide program planning at the state and local level. These data are used to identify high-risk populations, monitor trends and make data-driven decisions on how to address chronic disease and associated risk factors and eliminate disparities. ODH's success with planning and implementing evaluation has been shown through the [2005-2009 Cardiovascular Health Program Evaluation Report, Ohio Coordinated Chronic Disease Prevention and Health Promotion Program Evaluation Report—2014](#), and [Comprehensive Cancer Evaluation Report](#). Currently a contract is in place with The OSU College of Public Health, Center for Health Outcomes, Policy and Evaluation Studies to evaluate the CHC program 2010-2014 and two other BHO categorical programs. Lessons learned from the CHC program evaluation, including data collection and outcome evaluation measures from the 16 CHC-funded counties, will be applied to implementation and evaluation of the 1422 subawards.

ODH's leadership has invested resources to implement the [2013-2014 ODH Strategic Plan](#) which includes obesity prevention and expansion of the PCMH model as two of its four strategic priorities. ODH continues to be supportive of state and federal grant programs that expand and enhance the ability to address these priorities. For example, ODH has allocated state funding in 2013-2014 to address cardiovascular disease, the leading cause of death in Ohio, by supporting activities that expand 1305's reach in MTM and HTN management and control for African Americans. To achieve optimal performance and coordination for program planning and development, ODH leadership will provide needed resources (e.g., fiscal and staffing), professional staff development, accountability and communication through cross-bureau and cross-division collaboration to plan and more effectively implement strategies across Components 1 and 2.

Readiness to Work on Component-Specific Strategies

Component 1: In 2013 alone, [CHC reached over 825,000 Ohioans](#) and leveraged almost \$2 million dollars of private and public funds to expand and enhance healthy eating, active living and tobacco strategies. Healthy corner stores, Complete Streets policies, and joint use agreements are a snap-shot of what CHC implements locally across Ohio ([Click here for CHC's 2013 Success Stories](#)). CHC has established cross-sector partnerships with SRTS, HPIO, Ohio Department of Transportation, The OSU Extension, and OHA, among others. These same partners will collaborate within the healthy eating and active living activities to accomplish strategies. An example of CHC expertise and local experience includes implementation of 16 joint use agreements and 11 healthy corner stores in 2014 alone. Joint use agreements have

gained particular momentum in the last year in Ohio. ODH has partnered with SRTS and HPIO to provide joint use training with national experts from ChangeLab Solutions. In addition, CHC has worked with the American Heart Association on joint use as a funded objective by Voices for Healthy Kids. The ODH Healthy Places Coordinator will be an asset for the 1422 grant, in particular to the built environment and physical activity strategies. This urban planning expertise will be provided to the 1422 subawardees through targeted technical assistance on development of master plans that include walking and biking. ODH's experience in access to healthy foods and the statewide healthy retail brand and materials currently under development will enhance the ability for the 1422 subawards to excel and successfully achieve outcomes.

Ohio has established support for lifestyle change programs for those at high risk for diabetes, as reflected by four YMCA-DPP projects in Ohio and five additional DPPs in both urban and Appalachian communities which have reached more than 1,000 people. DSME Master Trainers are currently located in all regions of the state through local AAAs. The ODA, AAA network and public health partners graduated more than 500 participants from DSME in 2012. These existing programs will serve as the foundation to develop a primary care and community lifestyle change referral network to increase program access for high-risk Ohioans and ensure long-term sustainability.

HOBC is directed by the BHO Worksite Wellness Manager who was selected and certified by the CDC as a Work@Health™ Trainer. HOBC focuses on worksite wellness, including development of policies and guidelines, providing technical assistance to businesses and organizations, and serving as a network for model worksite wellness programs in the state. With over 325 members, the HOBC has the capability to reach businesses of all sizes throughout the state, and also serves as a pilot site for many worksite wellness initiatives developed by ODH. Meeting at least quarterly, regional HOBCs are well positioned to work closely with ODH to implement worksite wellness activities in 1422 communities, including support for lifestyle change programs. Participating worksites are encouraged to apply for the Healthy Ohio Healthy Worksite Award, modeled after CDC guidelines, recognizing successful worksite wellness programs.

Component 2: ODH has established data-sharing/interagency agreements with statewide organizations including the OHA, Ohio Medicaid, and the Emergency Medical Services Incident Reporting System to obtain health system data related to heart disease, stroke and diabetes. These data have been published in statewide burden reports and used in program development. ODH has a Meaningful Use Group that discusses electronic exchange of data between public health agencies and Ohio's HIEs, hospitals, and healthcare providers, that will be encouraged to include HBP data in the Public Health Core Measure reports ODH receives. It also reviews ODH Meaningful Use policies and ensures coordination and consistency in working with eligible hospitals and professionals. This group has ensured the development and use of a single interface for eligible hospitals and professionals to indicate their interest in electronic reporting and to register intent for Meaningful Use.

ODH has demonstrated experience in implementing health systems quality improvement processes in clinical and community settings that are effective and sustainable. For example, in 2007, Ohio was one of six states funded to establish the Ohio Coverdell Acute Stroke Registry Program and has since engaged more than 40 hospitals in data-driven quality

improvement activities for acute stroke care and transition planning with more than 100 partners statewide. Ohio is one of 10 states participating in the 2013-14 ASTHO Million Hearts™ HTN Collaborative (including representation from Ohio QIN, public and private insurers, OAFP, and large healthcare systems and practices), which is focused on integrating public health and healthcare efforts to identify, improve and control HBP. Using the Toolkit to assist primary care physicians in reaching African-American men in their practices, Ohio's Million Hearts™ HTN Collaborative: (1) works with 11 primary care practices in Summit County to use NQF18 data to improve population health outcomes and provide monthly feedback to providers and health systems on patient metrics; (2) uses EHR to manage patient panels and identify higher risk patients with a focus on African-American men; and (3) implements rapid cycle quality improvement processes to improve HBP identification and management. Registries created by participating primary care practices have identified more than 7,300 hypertensive patients and improved control rates from 69.7 percent to 73.4 percent in the first three months of the intervention. Summit County Public Health offers care coordination services through their community health extenders to the HTN Collaborative's 11 primary care practices. High-risk hypertensive patients are referred to Summit County's care coordination unit for follow-up regarding needs identified in the office setting. This bi-directional referral system provides feedback to the physicians on patient outcomes from the interventions.

Project Management

Core project management of 1422 resides within ODH's BHO. BHO leadership and reporting structure is shown on the Administrative Table of Organization in Attachment B.

Michele Shough, Coordinated Chronic Disease Manager, housed in the Chronic Disease Section, will serve as 1422 Principal Investigator and provide leadership for the project, monitor ongoing progress, assure preparation of reports, secure key contracts, and hire new staff. Ms. Shough will also supervise Eric Greene, the Social Marketing Consultant, and other communications activities for Components 1 and 2, and serve as the point of contact with key partners and CDC.

Component 1 environmental and lifestyle change strategies and activities will be led by Ashley Davis, the CHC Program Manager, who will coordinate with the Component 2 lead. Ms. Davis supervises staff including the Healthy Places Coordinator, Caitlin Harley, as well as the to be hired Nutrition and Food Access Coordinator, who will serve as subject matter experts for 1422 subawardees related to Component 1 activities. The Worksite Wellness Manager, Linda Scovern, will implement 1422 worksite strategies and coordinate with 1305 DPP and DSME initiatives. The CHC program and the Worksite Wellness Manager are under the Primary Prevention Section, led by Ann Weidenbenner.

Component 2 health system interventions and community-clinical linkage strategies will be under the direction of the Chronic Disease Section, led by Barbara Pryor. Ms. Pryor is the Principal Investigator for 1305 and will provide oversight to assure that activities are aligned but not duplicative of those in 1422. Ms. Pryor is the subject matter expert for Component 2 and will be responsible for training new 1422 staff. She also oversees the new PHHSBG-funded Toolkit statewide blood pressure initiative for African-American men and women that complements activities in 1422. The Heart Disease and Diabetes Prevention Manager, to be hired, will oversee day-to-day activities related to Component 2 and coordinate activities with Ms. Davis, the Component 1 lead. The Heart Disease and Diabetes Prevention Manager will

supervise the Clinical Systems Coordinator and Community Systems Coordinator, also to be hired, who will work directly with the 1422 subawardees to implement Component 2 strategies.

Holly Sobotka, the Chronic Disease Epidemiology and Evaluation Manager, provides leadership to the Chronic Disease Epidemiology and Evaluation Unit, which includes the 1422 Chronic Disease Epidemiologist, to be hired, and the Ohio BRFSS. Ms. Sobotka manages the 1305 evaluation contract, and will assist in developing the 1422 evaluation contract and oversee the 1422 evaluation and monitoring activities. The 1422 Chronic Disease Epidemiologist will work with CDC to develop specific process measures and reporting mechanisms to collect data from 1422 subawardees, and collect, analyze and disseminate data to develop, monitor and evaluate all 1422 activities.

A 1422 leadership team will be formed consisting of the Coordinated Chronic Disease Manager, the Primary Prevention and Chronic Disease Section Managers, the CHC Program Manager, the Heart Disease and Diabetes Prevention Manager, and the Chronic Disease Epidemiology and Evaluation Manager to provide comprehensive leadership and assure coordination across both Components. A 1422 Functional Table of Organization (Attachment B) illustrates the synergistic relationship among the leadership team, Component 1 and 2 staff and the cross-cutting positions for social marketing, surveillance/epidemiology and evaluation. Resumes for existing ODH staff are provided in Attachment C.

ODH will contract and collaborate with the following key organizations and agencies to implement program strategies and achieve project outcomes: 1422 evaluation contractor (to be determined), OAFP, Abt SRBI, Inc., OCHWA, Ohio Colleges of Pharmacy (two to be selected), the Food Trust, Smart Growth America, OPA, OHA Foundation for Healthy Communities, Ohio QIN, DPPs, HOBC, and ODA.

ODH has a well-established infrastructure through its Office of Financial Affairs to develop, release and award competitive RFPs to local agencies/jurisdictions. This infrastructure will be used to fund the 1422 subawardees. 1422 subawardees will submit SQPRs and expenditure reports online through ODH's Grants Management Information System. SQPRs will consist of 1422 subawardee work plan activity progress as well as data on performance measures for evaluation. 1422 subawardees will be required to attend monthly web-based meetings/trainings as well as at least three in-person meetings a year. The ODH Clinical Systems and Community Systems Coordinators will provide technical assistance and training, conduct site visits, provide verbal and written feedback on SQPRs and expenditure reports, and provide a year-end performance summary to 1422 subawardees. Strategy-specific experts (e.g., Healthy Places Coordinator and the Nutrition and Food Access Coordinator) will provide targeted technical assistance and trainings, as needed.

State and Local Public Health Actions to Prevent Obesity, Diabetes, and Heart Disease and Stroke: Ohio

Inputs: Funding—1422, leveraged funds from 1305, PHHSBG, Million Hearts™, state GRF; **Partners**—OCDC, Medicaid, OHA, SRTS, HOBC, ODA, Ohio YMCAs, OCHWA, OAFP, OPA, OSU College of Pharmacy, Ohio QIN, DPPs; **Contracts**—1422 Evaluator, OAFP, Abt SRBI, OCHWA, Ohio Colleges of Pharmacy, Food Trust, Smart Growth America; **Guidance/Support**—DDT, DHDSP, DNPAO, ODH Leadership; **Data/Software**—SQPR, BRFSS, Food Environment Index, USDA Food Atlas, Complete Streets policies, LCN assessment, OHSS, benefit provider data, OPA, Nielsen, GIS

