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The Problem

In 2015, 5 million people in Virginia had at least 1 chronic disease.

2 million people had 2 or more chronic diseases.

In Virginia, projected total cost of chronic disease 2016-2030 = $1.1 Trillion

Improving Health Across the Lifespan

Where people live, learn, work and play

Infants and Toddlers
Create healthy environments in early child care centers through training and policies that promote healthy eating and physical activity.

Children and Adolescents
Establish healthy school environments by promoting the development and adoption of healthy food, recess and physical education policies.

Adults
Promote awareness of prediabetes and high blood pressure in worksites and community settings, and encourage participation in lifestyle change programs to prevent and control chronic conditions.

What We Did

Track - chronic diseases and risk factors to document progress and disseminate information to stakeholders for action.

Partner - with early child care centers, schools, communities, professional and medical associations, universities, hospitals, health care providers, and health insurers to make the healthy choice the easy choice.

Support - healthcare systems to facilitate prevention, early diagnosis and quality management of chronic conditions.

Connect - community programs to clinical services to help people prevent or self-manage chronic conditions.

Our Impact

22,210 infants/toddlers attended early child care centers that were trained on how to create a healthy nutrition and physical activity environment.

Over 15,000 Virginians controlled or decreased their high blood pressure, which significantly reduced their risk for stroke and other heart-related events.

89,025 Virginians received diabetes education to support better management, including eating, medications, and physical activity.
Executive Summary

The State Public Health Actions to Prevent and Control Diabetes, Heart Disease, Obesity and Associated Risk Factors and Promote School Health (DP13-1305), known as Making a Healthier Virginia the Priority, was funded by the Centers for Disease Control and Prevention (CDC) to prevent and reduce the risk factors associated with childhood and adult obesity, diabetes, heart disease, and stroke, as well as, address chronic disease management. Funding for this project supported statewide implementation of cross-cutting approaches to promote health and prevent and control chronic diseases and its risk factors.

Strategies for Making a Healthier Virginia the Priority focused on improving multiple chronic diseases and the risk factors associated with the following public health priorities: undiagnosed/uncontrolled hypertension and diabetes, obesity, inactivity and unhealthy eating. The chosen interventions selected had broad reach and sustained health impact, and supported and reinforced healthy choices and healthy behaviors making it easier for Virginians to take charge of their health and achieve their optimal well-being. Although interventions strived to improve the health of the general population, special attention and focus was placed on sub-populations disproportionately affected by chronic diseases to reduce the gaps in health status and outcomes. As such, disparities by race, ethnicity, gender identity, sexual orientation, geography, socioeconomic status, disability status, primary language, health literacy, and other relevant dimensions were considered.

This five-year summary report highlights the work accomplished through this federal funding opportunity that will lead to a healthier Virginia that delivers healthier students to our schools and early care and education centers, healthier workers to our businesses and employers, and a healthier population to the health care system. The successes and accomplishments achieved were facilitated by the many public and private collaborative partnerships that were developed and nurtured across sectors that maximized resources, expanded reach, and enhanced project interventions and outcomes. The Virginia State Health Department would like to recognize and acknowledge these partners for their commitment and contributions to making a healthier Virginia the priority.

For more information about this report, please call 804-864-7761.
Breastfeeding

Why?

Decades of scientific research affirms the importance of breastfeeding for infant and maternal health. Despite this fact, breastfeeding rates continue to be low and disparate by various sociodemographic factors. The American Academy of Pediatrics recommends that infants be exclusively breastfed for about the first 6 months with continued breastfeeding alongside introduction of complementary foods for at least 1 year. In Virginia, of the 82 percent of mothers who have ever breastfed, 22 percent breastfed exclusively through 6 months and less than 36 percent continued up to 12 months. Communities with the lowest rates of breastfeeding also have the highest rates of breastfeeding-preventable illnesses including several of the leading causes of death and morbidity in Virginia: cancer, heart disease, lower respiratory disease, diabetes, and obesity.

How?

- Implemented a statewide effort to advance the implementation of the Virginia Maternity Care Quality Improvement Collaborative (VMCQIC) that included in-person collaborative learning sessions, customized technical assistance, webinars, and an online platform for resource and data sharing.
- Established the Virginia Maternity Center Breastfeeding-Friendly Designation Program to recognize maternity centers that have taken steps to promote, protect, and support breastfeeding in their organization.

What?

81% of Virginia’s maternity facilities have participated in the VMCQIC
Early Care and Education (ECE) Settings

Why?

In Virginia, approximately 75 percent of children ages birth to 5 years are enrolled in care outside the home, and nearly half of these children spend up to 12 hours a day in this type of environment. Despite a decrease of 1.5 percent, Virginia still has the highest rate of obesity among its most vulnerable children ages 2 to 4 (20 percent). Influencing children’s food and physical activity choices is easier when they are young; therefore, ECE settings can help young children build a foundation for healthy habits.

Who?

- Child Care Aware of Virginia
- Virginia Early Childhood Foundation
- Virginia Cooperative Extension Family Nutrition Program
- Virginia Department of Social Services
- Virginia Head Start Association
- Virginia Smart Beginnings
- University of North Carolina

We are grateful for the opportunity to participate in the grant and for the opportunities that it has provided to our program. Our overall program has seen a great increase in physical activity and we have incorporated better choices on our menu as well. Most importantly our children and their families are reaping the benefits.

How?

- Convened an interagency stakeholder group to identify ways Virginia could support child care programs in reaching the recommended standards and best practices for obesity prevention.
- Offered a multi-component healthy eating and physical activity training and technical assistance program to ECEs to help them make improvements in breastfeeding, healthy eating, physical activity, and screen time policies and practices.
- Using the Go Nutrition and Physical Activity Self-Assessment for Child Care tools, supported ECE directors and staff to assess current practices, set goals for improvement, and create action plans to achieve goals.

What?

- Reached 546 ECE programs
- Implemented 1,450 nutrition and physical activity best practices

“...We are grateful for the opportunity to participate in the grant and for the opportunities that it has provided to our program. Our overall program has seen a great increase in physical activity and we have incorporated better choices on our menu as well. Most importantly our children and their families are reaping the benefits.”
Schools

Why?

Childhood obesity prevalence continues to increase causing immediate and long-term effects on physical, social, and emotional health. Children and adolescents spend a large proportion of the day in schools making them an ideal setting to create environments that are not only supportive to, but reinforce, healthy behaviors. Schools can adopt policies and practices to encourage children to learn about and make healthy nutrition choices, achieve the recommended amount of daily physical activity, and better prevent and/or manage the daily challenges from chronic health conditions, such as asthma, obesity, diabetes, food allergies, and poor oral health.

How?

- Supported local schools by promoting the establishment of wellness councils and healthy nutrition and physical activity policies and environments (e.g., healthy celebrations and fundraisers, active classrooms and recess practices) through the provision of professional development, tailored technical guidance, resources, and tools.
- Supported the update of HealthSmart! VA, an online repository of curricula and resources designed to help teachers implement the Department of Education’s Health and Physical Education Standards of Learning.
- Provided professional development to school nurses empowering them with the knowledge, skills and abilities to identify and manage students with chronic health conditions with a focus on asthma, diabetes, epilepsy/seizure disorder, food allergies, hypertension, and obesity.
- Administered the National Association of School Nurses/National Association of State School Nurse Consultants Uniform Data Set Survey to public and private schools. Data collected describe the school communities, nature of practice, and outcomes of school nurse care, and identify and track students’ chronic conditions outcomes.

What?

Trained 206 school staff on how to update and implement local school wellness policies, affecting 1.3 million students.
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Worksites

Why?
Chronic conditions, such as heart disease, diabetes, stroke, and cancer, effect 5 million Virginians. In addition to increased mortality and morbidity that negatively affect our overall population, chronic conditions directly affect the workforce through increased healthcare costs, and account for $51.3 billion in medical care costs. Complications from chronic conditions can also negatively affect the state’s workforce through increases in absenteeism, presenteeism, and worker’s compensation claims. On average, employers in Virginia lose $21.3 billion in resources due to health conditions that can be prevented or better managed by improvements in a person’s lifestyle. Most chronic conditions can be prevented or better managed through better nutrition, increased physical activity, and tobacco product cessation resulting in an additional cost savings of $3.2 billion each year. iv

How?
• Under the brand name WorkWellVA, provided funding and technical assistance to local businesses and organizations to support activities focused on nutrition and physical activity.
• Enhanced the physical environment for Department of Health employees through signage, enhanced stairwells, and increased access to healthier food options.
• Developed programs that increased physical activity among state employees. Programs included walking challenges, the Walk With Ease Program, and physical activity classes (including yoga, cardio dance, kickboxing, and Zumba™).

What?

6,358 employees participating in state walking initiatives

Thank you. This is a great initiative and motivation. I am a bit slow these days as I am heading towards knee replacement but I need to keep walking to keep my knees flexible and to get in better condition.

Who?
• American Heart Association
• Department of Human Resource Management
Healthy Corner Stores

Why?
The Dietary Guidelines for Americans recommend: healthy eating patterns rich in fruits and vegetables, whole grains, and fat-free or low-fat dairy products. Many adults in the state consume one serving or less of fruit or vegetables per day (40.1 percent and 21.8 percent respectively). More than 1.7 million Virginians, including 480,000 children, live in low-income areas with limited access to affordable and nutritious food or food deserts. Virginia’s rate of nearly 18 percent exceeds the national low-access food rate of 7.3 percent. Having access to and the ability to purchase nutritious foods helps prevent high cholesterol and high blood pressure, and helps reduce the risk of chronic diseases such as obesity, diabetes, cardiovascular disease, and cancer.

How?
The Healthy Corner Store Initiative was aimed at improving access to healthy foods within underserved communities. Through this initiative community partners, corner store owners, and local farmers worked together to bring fresh fruits and vegetables into neighborhood stores within areas designated by the USDA as food deserts. Technical assistance and funding was provided to local health departments to:

- Identify and recruit small retail stores;
- Assess the stores’ inventory and physical environment using the Nutrition and Environment Measures Survey Tool;
- Work with store owners to implement recommended changes that promote the consumption of healthy food;
- Develop marketing and outreach strategies to promote healthy foods available in the selected stores; and
- Conduct promotional activities within the stores’ surrounding communities to promote the purchase of healthy foods available at the selected stores.

What?

Healthy Corner Stores recorded $23,392 in sales of 16,830 lbs. of fresh produce.

Who?

- H2Grower
- Kirby Farms
- Loving’s Produce
- Produce Source Providers
- Richmond City Health Department
- Shalom Farms
- Slade Farms
- Still House Creek Orchard
- Tricycle Gardens
- Virginia State Union
Complete Streets

Why?

In 2016, 23.3 percent of Virginians were physically inactive.\textsuperscript{ix} Virginia has the 24th highest adult obesity rate in the nation. In 2016, 65.1 percent of adults were overweight or obese.\textsuperscript{x} Over 27 percent of Virginians age 10-17-years old and 13 percent of high school students are overweight or obese.\textsuperscript{ix} Complete Streets are streets designed and operated to enable safe use and support mobility for all users. Complete Streets policies improve public health by promoting physical activity through walking and bicycling, resulting in fewer occurrences of chronic health conditions.

How?

Provided customized, interactive Complete Streets workshops and technical assistance to local health departments based on community needs to build local capacity to implement Complete Streets and strengthen relationships between public health professionals, transportation practitioners, and community stakeholders.

What?

Over \textbf{300 partners} trained in \textbf{10 localities}, impacting \textbf{479,344 residents}.
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INTERVENTION

Diabetes Prevention Program

Why?
Over nine percent of Virginians have Type 2 diabetes or one in every ten Virginians.\textsuperscript{xii} Approximately 24 percent of these individuals are undiagnosed.\textsuperscript{xii} New cases of diabetes are reported at a rate of 7.3 per 1,000 people.\textsuperscript{xiii} Participation in the Diabetes Prevention Program (DPP) has been shown to significantly reduce an individual’s risk for diabetes and has lasting impacts on overall health.\textsuperscript{xiv} Despite the proven benefits, in 2014, only eight organizations in Virginia offered the DPP to support prediabetes education and awareness.

How?
• Conducted formative research to determine existing diabetes prevention efforts and key players. Research findings were used to coordinate a State Engagement Meeting that attracted over 100 partners, and resulted in the development of the “Diabetes in Prevention in Virginia Strategic Plan,” and heightened interest in DPP.
• Collaborated with the National Association of Chronic Disease Directors and CBS HealthWatch to deliver prediabetes and DPP health messages across social media sites and televisions located in 109 provider waiting rooms.
• Trained Community Health Workers to use the Centers for Disease Prevention and Control’s prediabetes risk assessment tool to raise awareness and provide education and resources to high-risk individuals.

What? Participation increases in DPP

Who?
• Virginia Diabetes Council
• Virginia Center for Diabetes Prevention and Education
• Virginia Cooperative Extension
• Local Health Departments
• YMCA
• Payers (private and public)
• Employers
• National Association of Chronic Disease Directors
• American Association of Diabetes Educators – Virginia Coordinating Body

6,088 total participants

![Image of participants]
Community Health Workers

Why?
Community health workers (CHWs) are frontline public health workers that are proven to be effective members of the healthcare team through their ability to connect with and support individuals within their community. CHWs do not require licensure, since as they do not provide clinical services. However, certification assures that the individual has met specific core competencies through standardized training. Along with certification, financing mechanisms can sustain and support long-term CHW activities. Despite the research behind CHWs, a national certification or finance mechanism does not exist. Virginia partners have been working together since 2004 to support and advance CHW efforts by pursuing certification and sustainable payment mechanisms.

How?
- Co-facilitated the Virginia CHW Advisory Group with the Institute for Public Health Innovation to support policy changes that support the role, acceptability, and reimbursement options for CHWs across Virginia.
- Established CHW core competencies and produced a standardized CHW curriculum and disease-specific trainings.
- Established CHW Networks in ten local health departments across Virginia.

What?

The training was very informative, it also gave me good ways to talk about blood pressure without using medical terms.
Health System Improvement Interventions

Why?
Health care providers and systems of care are rapidly realigning to ensure quality care is delivered in addition to optimizing costs and improving population health. Most health care costs are attributed to hospitalizations, which are avoidable if appropriate prevention and primary care resources are accessed earlier. In 2013, there were a reported 1,294 avoidable hospital stays. Using data and adjusting clinic workflows increases the likelihood of reaching high-risk patients earlier.

How?
- Surveyed selected primary care providers to capture existing capabilities and practices related to quality improvement, data reporting, team-based care practices, and chronic disease management.
- Supported the SYNC: Transforming Healthcare Leadership Program to further advance and support team-based care and interprofessional collaborations in hospital settings. SYNC activities focused on the Centers for Disease Prevention and Control’s 6|18 initiative to advance key evidence-based strategies targeting diabetes and hypertension.
- Partnered with Federally Qualified Health Centers to implement a population health dashboard designed to improve key chronic disease indicators.

What?

Healthcare Teams in Action at SYNC

I believe that SYNC will really assist in the Virginia plan for well-being. SYNC really brings attention to what we can do for our patient and to be aware that they have much more going on than what they are presenting to our office with.
Targeting and Preventing Hypertension

Why?
The 2015 Behavioral Risk Factor Surveillance Survey (BRFSS) data indicates that 31.9 percent of Virginians were aware they had hypertension and 60.9 percent of the population took medication for blood pressure. The Million Hearts™ initiative released a standardized treatment protocol for hypertension, which outlined lifestyle modifications, self-monitoring, and medication as primary ways to control blood pressure. Self-measured blood pressure monitoring (SMBP) has been shown to significantly reduce the risk of death and disability associated with hypertension.

How?
- Surveyed healthcare providers and pharmacists to collect information on their experience and policies related to SMBP practices and patient engagement.
- Embedded health coaches into clinical practices to function as an extended member of the medical team providing personalized support, SMBP education, and appropriate community referrals to increase hypertension control.
- Created a SMBP toolkit to educate and inform patients on hypertension, SMBP, and other healthy behaviors.

What?

Of 647 patients seen with an average of 45 days between visits, 455 patients had a decrease in blood pressure.
Diabetes Self-Management Education

Why?
Over 630,000 Virginians have diabetes, yet more than 45 percent have never taken a class on how to better manage their diabetes. Diabetes requires that a patient learn and take on many self-management habits to improve health outcomes and quality of life. For this reason, diabetes self-management education and support (DSME/S) programs were established to help individuals navigate their care and the decisions they need to make on a daily basis. It has been proven that DSME/S is a cost-effective method to reducing readmissions and other associated healthcare costs.

How?
- Supported continuing education and professional trainings for certified diabetes educators.
- Established a mentor group to support and sustain DSME/S programs and increase the number of certified diabetes educators in Virginia.
- Developed and disseminated key messages to increase the public’s knowledge of DSME/S programs and the importance of diabetes education.
- Informed and educated diabetes partners and stakeholders through a monthly newsletter developed and released by the Virginia Diabetes Council.

What?

230 television ads reaching an estimated 635,368 people.
Medication Therapy Management

Why?
Over 11 million U.S. adults are neither aware of their hypertension nor take antihypertensive medication.xxiv In 2015, over 33 percent of Virginians reported having hypertension with 60.9 percent of those indicating that blood pressure medication had been prescribed. Hypertension risk can be reduced significantly through the inclusion of a pharmacist on the care team, medication adherence, and patients taking a bigger role in their disease management.xxv

How?
• Provided trainings to physicians, pharmacists, and other healthcare partners in the use of the Pharmacist Patient Care Process and Collaborative Practice Agreements.
• Collaborated with Walgreens Pharmacy to support a pilot program that offered blood pressure monitoring devices at a reduced cost to patients with high blood pressure.
• Partnered with Health Quality Innovators to pilot chronic care management models of care to increase physician-pharmacist-patient interactions.
• Developed and disseminated a survey to 3,000+ pharmacists working in Virginia to capture information on medication therapy management practices and prevalence.

What?

518 pharmacists were surveyed and results indicated that 71% of pharmacists provide medication therapy management services.

Who?
• Health Quality Innovators
• Pharmacy Schools
• Virginia Pharmacist Association
• Board of Health Professions
• Board of Pharmacy
• National Association of Chronic Disease Directors
• Independent and Commercial Pharmacies

“Not just documenting in the chart, but actually taking the time to make sure they are progressing properly and improving.
—Pharmacy Owner
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xi Virginia Department of Health, Division of Policy and Evaluation, Behavioral Risk Factor Surveillance Survey, 2014. Weighted counts and weighted percents are weighted to population characteristics.


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State Public Health Actions to Prevent and Control Diabetes, Heart Disease, Obesity and Associated Risk Factors and Promote School Health (DP13-1305)

Funded through CDC Cooperative Agreement #NU58DP004832