Community Based Interventions
2010–2013

BRIEF EXECUTIVE SUMMARY

National Center for Chronic Disease Prevention and Health Promotion
Division of Community Health

Introduction

Chronic diseases and conditions such as heart disease, cancer, stroke, and diabetes cause premature death, reduce quality of life, and increase medical costs for millions of Americans. In 2010, heart disease was the leading cause of death in the United States, followed by cancer, respiratory disease, and stroke.[1] More than 75% of annual health care expenditures in the United States—more than 2.5 trillion dollars—are spent treating and managing chronic diseases and conditions.[2]

Lack of physical activity, poor nutrition, and tobacco use and exposure are responsible for much of the illness, suffering, and death associated with chronic diseases. Moreover, these behaviors and related health problems continue to disproportionately affect low-income and minority groups.

The Communities Putting Prevention to Work (CPPW) initiative launched in March 2010 by the US Department of Health and Human Services (DHHS), helped communities nationwide implement environmental-level interventions aimed at preventing and reducing obesity, tobacco use, and exposure to secondhand smoke.

Two federal laws support this initiative: the American Recovery and Reinvestment Act (ARRA) provided $450 million and the Affordable Care Act provided $30 million. Using a competitive process, the Centers for Disease Control and Prevention (CDC) distributed $403 million to **50 communities** of varying sizes (see map below) in the form of 2-year cooperative agreements. The remaining funds were applied toward program oversight, technical assistance to awardees, and implementation of a multi-component evaluation.

Community-Based Interventions

The CPPW initiative funded community-based interventions aimed at preventing and reducing obesity, tobacco use, and exposure to secondhand smoke.

The initiative's overarching goals were to:

- Improve nutrition.
- Increase physical activity.
- Decrease overweight and obesity prevalence.
- Decrease smoking prevalence.
- Decrease exposure to secondhand smoke.

To achieve these goals, CPPW awardees planned, implemented, and evaluated interventions that combined various evidence-based strategies aimed at improving policies, systems, and environments to make healthy living easier.

Improving Access to Healthy Foods and Beverages

To prevent obesity and reduce its prevalence, **37 CPPW communities** increased access to healthy food and beverage choices using a variety of interventions.

Strategies included:

- Increasing healthy food and beverage availability in vending machines.
- Improving the availability, quality, and affordability of healthy foods in corner stores.
- Improving the nutritional content of food in a variety of settings through policies, guidelines, or standards.

To address health disparities, communities worked with the Supplemental Nutrition Assistance Program; the Special Supplemental Nutrition Program for Women, Infants, and Children; and other food assistance initiatives to enable their clients to purchase fruits and vegetables using the Electronic Benefit Transfer system.

Increasing Access to Physical Activity Opportunities

In addition to providing greater access to healthy food options, **39 CPPW communities** also created more opportunities for active living.

Strategies included:

- Urban design and land use plans.
- Structural improvements to the built environment, including the creation of bike lanes and walking trails.
- Joint use agreements with schools, faith-based organizations, and community centers to make athletic facilities available for public use.
- Guidelines requiring daily physical activity in schools and child care and after-school settings.

Communities also supported local organizations to develop wellness programs that promote physical activity and healthy eating.

Preventing Tobacco Use and Secondhand Smoke Exposure

Preventing tobacco use and secondhand smoke exposure can help reduce chronic disease prevalence. A total of **21 CPPW communities** addressed tobacco prevention and control by implementing strategies in various settings.

Strategies included:

- Restricting the sale of tobacco products to young people.
- Expanding smoke-free protections in various settings, including workplaces, restaurants, bars, campuses, parks, and beaches.
- Reducing secondhand smoke exposure in multi-unit housing complexes.
- Expanding Quitline and other cessation services.

Implementation Support

CDC provided extensive implementation support to awardees via program oversight, training and technical assistance, and assistance with media and communication activities.

Program Oversight and Fiscal Management

To ensure compliance with all requirements associated with ARRA funding, CDC created a comprehensive system to monitor and support awardee performance.

Elements included:

- **Performance monitoring** via monthly phone calls with awardees to track progress towards completing key tasks and milestones.
- **Fiscal management** of expenditures to ensure compliance with requirements and prompt follow up with awardees when issues arose.
- **Site visits** to monitor performance, resolve problems, and provide technical assistance.
- **Monthly internal meetings** to identify awardees facing barriers and provide the needed support.

Training and Technical Assistance

CDC provided training and technical assistance to awardees on various topics, such as program implementation, evaluation, and capacity building.

Examples included:

- **Individualized technical assistance** to awardees via regular contact, site visits, and using subject matter experts for specialized support.
- **Meetings and workshops** including an annual CPPW awardee meeting, four Action Institutes, a CPPW Evaluator Institute, and a series of workshops on dissemination of evaluation findings.
- **CPPW Online Resource Center**, a new web-based resource offering numerous products and tools, including webinars, model policies, tool kits, databases, and guides.
- **Technical assistance webinars** for awardees, including 27 webinars on program evaluation.
- **Coordination of peer-to-peer efforts** including formation of peer teams, online surveys to identify technical assistance topics, and topic-specific conference calls.

Support for Media and Communication Activities

CDC recognized the diverse audience and topics targeted by CPPW communities and provided support for local communication efforts.

Media and communication activities included:

- **Technical assistance** on how to develop individually tailored media plans that leveraged existing state- and community-produced ads.
- **Earned-media support** with biweekly media strategy conference calls and news outreach activities, such as the production of tobacco and obesity "infographics" for news outlets.
- **CPPW Radio Media Tour,** a 16-city, coast-to-coast satellite radio tour to promote CPPW success stories.
- **Community Health Media Center,** an online repository of more than 300 advertisements and communication resources about preventing obesity and chronic conditions (similar to CDC's Tobacco Media Campaign Resource Center).
- **Making Health Easier,** a social networking web-based platform for the sharing information and resources among communities and for public outreach and response.

Other products and activities included a national CPPW website and video, written profiles of all 50 communities, spokespersons training, and support for efforts involving local and national partners.

Multicomponent Evaluation

To assess the national impact of the CPPW initiative, CDC carried out a multicomponent evaluation that collected and analyzed quantitative and qualitative data from multiple sources to assess improvements in short-term, intermediate, and long-term outcomes.

Performance Monitoring

CDC project officers monitored program performance and expenditures, and recorded each community's progress in meeting the objectives and milestones in its action plan. Performance monitoring allowed CDC to assess the effect of the CPPW initiative by calculating the percentage of objectives met and estimating the potential number of individuals reached by the interventions.

Enhanced Evaluation (Biometric Supplement)

This evaluation component provided $9.3 million in supplemental funding to six communities:

- New York City, NY,
- Los Angeles County, CA,
- San Diego County, CA,
- Philadelphia, PA,
- Suburban Cook County, IL,
- Mid-Ohio Valley, WV.

The supplemental funding allowed the communities to expand data collection, with an emphasis on obtaining biometric data (e.g., height, weight).

CPPW Behavioral Risk Factor Survey

CDC used its Behavioral Risk Factor Surveillance System (BRFSS) to collect data on the health of adults in CPPW communities. Special BRFSS samples were drawn for each CPPW community, with data from about 1,500 adults being collected in 2010 and 2012. The CPPW-specific BRFSS included five community modules to further assess individual and environmental characteristics relevant to CPPW.

CPPW Youth Risk Behavior Survey

To obtain data regarding youth, the evaluation used a CPPW-specific version of CDC's Youth Risk Behavior Surveillance System (YRBSS) that monitors priority health-risk behaviors among young people. Conducted in the 2010–2011 school year with a representative sample of 1,500 to 2,000 students per community, the survey assessed CPPW-specific risk factors and health outcomes.

Cost Study

Through an interagency agreement with CDC, the DHHS office of the Assistant Secretary for Planning and Evaluation carried out a study that collected and analyzed data related to direct costs incurred by CPPW-funded communities.[3] From 2010 to 2013, 40 ARRA-funded CPPW communities provided cost-related data on a quarterly basis using a web-based interface.

Case Study

The case study explored the key factors affecting the implementation of CPPW interventions. Conducted with 18 communities in 6 states, the study combined a review of program documents, with 2 rounds of site visits and semi-structured interviews with program staff, community partners, and members of the leadership team.

Prevention Impacts Simulation Model (PRISM)

This modeling study estimated the long-term health and economic impact of CPPW community interventions. The study used a CPPW-specific version of the Prevention Impacts Simulation Model (PRISM), a comprehensive, evidence-based system dynamics model that estimates the potential impact of interventions designed to address cardiovascular disease and related risk factors in terms of deaths averted and health costs saved.[4]

Cross Evaluation

The CPPW cross evaluation integrated and synthesized evaluation data from across communities and data sources to answer broad, cross-site evaluation questions.

Accomplishments and Lessons Learned

CPPW demonstrates the economic feasibility of implementing large-scale interventions designed to improve long-term health.

Improved Access to Healthy Environments

By June 2013, CPPW communities had completed 73% of the 790 objectives in their action plans. Using US Census and target population data for each objective in their action plans, awardees estimated the potential population reach of these interventions. These estimates suggest that as a result of the initiative[5]

- An estimated 40.9 million Americans now have increased access to healthy food or beverage options in schools, after-school programs, early child care settings, workplaces, and other community settings.
- An estimated 45.2 million Americans now have increased access to physical activity opportunities in recreational facilities, churches, businesses, schools, and other community settings.
- An estimated 27.4 million Americans now have increased protections from deadly secondhand smoke exposure in workplaces, restaurants, bars, schools, multi-unit housing complexes, campuses, parks, and beaches.

Health Costs Saved and Deaths Averted

The PRISM computer modeling study estimated the long-term health and economic outcomes associated with CPPW activities, and compared them with the outcomes that would have occurred without the initiative.

Based on PRISM simulation estimates[5]

- If community health improvements in the 50 CPPW communities are sustained beyond the initial program, between 2010 and 2020 there will be 14,000 fewer deaths from all risk factors than expected given current trends, and a present value of $2.4 billion in health care costs averted.
- The present value of health care costs averted through 2020 is more than 5 times the initial CPPW program investment of $403 million.
- For every federal dollar invested in CPPW, sustained implementation of these community health improvements will generate an estimated cumulative savings of $5.96 billion in public and private health care costs by 2020.

Other Benefits to Communities

The CPPW initiative also increased local capacity to conduct program evaluation and disseminate findings. More than 100 CPPW-related manuscripts have been published in peer-reviewed journals. In addition, awardees and other communities continue to benefit from the various technical assistance resources developed with CPPW funds.

Lessons Learned

Lessons learned from the CPPW initiative are informing the CDC's work on other community-based initiatives. Examples include

- To address extensive reporting requirements (e.g., more than 1,500 ARRA reports), CDC developed a performance monitoring database and standard operating procedures now used to oversee other award programs.
- As environmental-level improvement occurs in stages, it may take longer than a 2-year project period to see the effects, so evaluation plans are being developed to measure the long-term outcomes.
- Strategies for enhancing sustainability learned from CPPW included discussing the issue during monthly calls with awardees, creating a peer-to-peer network, providing tailored technical assistance and resources, and involving national organizations.

References

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