Field Notes

Colorado Heart Healthy Solutions

Problem:

To address growing rates of high blood pressure, elevated cholesterol, and other risk factors related to cardiovascular diseases in Colorado, there is a need to help people effectively navigate community health systems in order to support behavior change strategies and medication adherence.

Project:

Colorado Heart Healthy Solutions (CHHS) is a community-based program in which community health workers (CHWs) help participants learn about their risk of cardiovascular disease (CVD), support them in taking steps to improve cardiovascular health, and promote access to health care and lifestyle resources. CHWs provide health education, medical and lifestyle resource referrals, and ongoing support using motivational interviewing skills to activate behavior change. CHWs conduct outreach activities in a variety of settings, depending on where their priority population can be reached. The program is free to participants, and settings include pharmacies, grocery stores, health fairs, work sites, and clinic-based offices.

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Overview

The CHHS program started as a partnership between Denver Health's Community Voices and Colorado Prevention Center's (CPC) Community Health. CPC Community Health previously used unmanned kiosks to provide personalized cardiovascular health information in community settings as part of the Health-e-Solutions program. In July 2009, CPC Community Health's kiosk program merged with Denver Health's Community Voices' CHW Program to enhance participant interaction and care coordination through face-to-face intervention. As a result, the program emphasis shifted from raising awareness of the need for screening to providing community navigation and ongoing follow-up services intended to reinforce behavior change and medication adherence. The CHWs are supported by program staff and a data collection and decision support system known as the Outreach, Screening, and Referral system (OSCAR) which was launched in November 2009. The decision support component of the OSCAR system generates evidence-based health recommendations and referral cues to provide consistent, evidence-based messaging. OSCAR's data collection component is used to track client risk factors and outcomes, manage an inventory of local medical and healthy living resources, and monitor CHW productivity.

Program Services

Core elements of CHHS include the use of evidence-based guidelines to inform CHWs' counseling and referral decisions and standardized electronic tracking requirements for CVD screening; however, the program encourages CHWs to leverage community resources to meet the needs of the priority population. CHHS features a blended approach of standardized and flexible implementation.

The sequence of activities performed by CHWs is described below.

- Each CHW provides CVD screening (including cholesterol, glucose, weight, and blood pressure measurements) and a 10-year CVD risk assessment with individualized recommendations based on national guidelines. The CHW explains the results to the participant then uses motivational interviewing techniques to develop an action plan aligned with the individual's goals. This technique focuses on reflective listening, understanding participants' values, and assessing readiness to change; it is not fact-sharing or a lecture. If the participant requires a referral to a physician (as determined by the OSCAR decision-support algorithm), the CHW will provide one.
- CHWs provide program participants with information about community resources by using an asset list specific to each community.
- CHWs conduct a follow-up call within two weeks of the initial screening/assessment to check on the status of the participant's referrals and action plan. The call provides encouragement and guidance to assist participants in overcoming any barriers. CHWs are encouraged to conduct at least three follow-up calls, if needed. The duration and frequency of future follow-up calls are decided by the CHW and the participant.
- Six months after the initial screening and then annually thereafter, CHWs reassess the participant's health status, including changes in key CVD risk factors and progress on the participant's action plan. Participants and CHWs can view the same screen so that they can simultaneously compare current risk factors with previous results. The interactive on-screen functionality of the OSCAR system allows this to happen.

Field Notes (cont.)

Goals and Objectives

The overarching goal of the CHHS program is to improve cardiovascular health across Colorado by promoting access to primary care and encouraging healthy behaviors. A secondary goal is to build the capacity of communities to change norms related to health and to enable community members to take responsibility for adopting healthy lifestyles.

- Expected short-term outcomes of the program are:
- Increase individual behavior change (e.g., physical activity, healthy eating, smoking cessation)
- Increase provider adherence to nationally accepted evidence-based guidelines for CVD treatment
- Decrease clinical factors that contribute to CVD (e.g., hypertension and high cholesterol and glucose levels)

The long-term expected outcomes of the program include a reduction in the number of CVD events and cases of diabetes, as well as better control of hypertension, dyslipidemia, and obesity.

Intended Participants

CHHS primarily serves hard-to-reach rural residents, minorities, and the medically underserved throughout Colorado. In over five years, CHHS has assisted more than 36,000 individuals (91% underserved, including 39% ethnic minorities, 22% individuals with less than a high school education, 33% individuals with no health insurance, 6% Medicaid recipients and 65% residents of rural or frontier counties).

Progress Toward Implementation

To help the CHWs deliver the latest clinical information to their clients, the OSCAR system is updated to reflect the most current evidence-based guidelines. The program conducts quarterly strategy sessions with all local CHW supervisors to identify best practices. These best practices are then disseminated during monthly calls with the larger group of CHWs to promote ongoing iterative refinements to implementation.

Community Involvement

CHHS closely collaborates with community agencies and clinics to form a resource network that helps clients improve their health. The network is made up of CHWs, public health professionals, and medical providers. This network supports people in their efforts to lead healthier lives. Physicians based in the communities served by the program receive ongoing provider education and supplemental materials to encourage adherence to national cardiovascular health screening and treatment guidelines.

In four counties (Adams, Lincoln, Morgan, and Pueblo), CHHS collaborates with the Colorado Well-Integrated Screening and Evaluation for Women Across the Nation (WISEWOMAN) Program to plan and implement health coaching. WISEWOMAN—a Centers for Disease Control and Prevention (CDC) funded program—provides cardiovascular screenings, risk reduction counseling, referrals, lifestyle programs, and other healthy behavior support options to low-income, underinsured/uninsured women ages 40-64. The Colorado Department of Public Health and Environment operates the WISEWOMAN Program in Colorado.

Reach and Impact

The program's current reach is the underserved population within the state. This population includes low-income, medically underserved adults (i.e., low medical/health resources). The program grew from five initial communities (before the merger with Denver Health in July 2009) to more than 30 at its peak. As of March 2015, the program is being implemented in 27 out of the 64 counties in the state. To date, the program's achievement of short-term outcomes is:

Behavior Change: Among at-risk clients (n = 5200) comparing pre- and post-intervention assessments during 2010-2015, 28% of clients who consumed highfat foods daily decreased their fat intake; 16% of clients who consumed less than five servings of high-fiber foods each day increased their fiber intake; and 36% of clients who engaged in physical activity fewer than three times per week increased that amount.

Provider Adherence: In 2012, surveys were conducted with approximately 30 health care providers to measure their knowledge of optimal CVD treatment and prevention strategies before and after six months of public health detailing. Greatest average increases in knowledge were noted in hypertension and risk for stroke (75% to 93%), statins for diabetics (32% to 79%), and the central role of diet/physical activity for metabolic syndrome (39% to 57%).

Clinical Factors: Based on 2010-2015 data, the program has seen a mean decrease in systolic BP of 4 mm Hg, diastolic BP of 3 mm Hg, and LDL-cholesterol of 14 mg/dL among at-risk clients (n=5200) who returned for a re-test a mean of 27 months after screening. More specifically, the mean decrease for clients with a systolic BP >140 mm Hg screening was 11 mm Hg, and the mean decrease for clients with an LDL-cholesterol >130 mg/dL at screening was 31 mg/dL.

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