NACCHO
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2017 Model Practices

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Model Practice Title

Please provide the name or title of your practice: *

Elkhorn Logan Valley Public Health Department

Practice Categories

Model and Promising Practices are stored in an online searchable database. Applications may align with more than one practice category. Please select all the practice areas that apply.: *

- [x] Access to Care
- [ ] Advocacy and Policy Making
- [ ] Animal Control
- [ ] Coalitions and Partnerships
- [ ] Communications/Public Relations
- [ ] Community Involvement
- [ ] Cultural Competence
- [ ] Emergency Preparedness
- [ ] Environmental Health
- [ ] Food Safety
- [ ] Global Climate Change
- [x] Health Equity
- [ ] HIV/STI
- [ ] Immunization
- [ ] Infectious Disease
- [ ] Informatics
- [ ] Information Technology
- [ ] Injury and Violence Prevention
- [ ] Marketing and Promotion
- [ ] Maternal-Child and Adolescent Health
- [ ] Organizational Practices
- [ ] Other Infrastructure and Systems
- [ ] Organizational Practices
- [ ] Primary Care
- [ ] Quality Improvement
- [ ] Research and Evaluation
- [ ] Tobacco
- [ ] Vector Control
- [ ] Water Quality
- [ ] Workforce
- [ ] Conference Theme: Bridging Clinical Medicine and Population Health

Other::

Chronic Disease, Obesity, Nutrition

Is this practice evidence based, if so please explain. :

Winnable Battles

To keep pace with emerging public health challenges and to address the leading causes of death and disability, CDC initiated an effort called Winnable Battles to achieve measurable impact quickly.Winnable Battles are public health priorities with large-scale impact on health and known effective strategies to address them. Does this practice address any CDC's seven Winnable Battles? If so, please choose from the following:: *

- ☐ Food Safety
- ☐ HIV in the U.S.
- ☑ Nutrition, Physical Activity, and Obesity
- ☐ Tobacco
- ☐ Healthcare-associated Infections
- ☐ Motor Vehicle Injuries
- ☐ Teen Pregnancy
- ☐ None

Overview: Provide a brief summary of the practice in this section (750 Word Maximum)

Your summary must address all the questions below:

- Brief description of LHD- location, demographics of population served in your community
- Describe public health issue
- Goals and objectives of the proposed practice
- How was the practice implemented/activities
- Results/Outcomes (list process milestones and intended/actual outcomes and impacts.
  - Were all of the objectives met?
  - What specific factors led to the success of this practice?
- Public Health impact of practice
- Website for your program, or LHD.

750 Word Maximum

Please use this portion to respond to the questions in the overview section. : *

Elkhorn Logan Valley Public Health Department (ELVPHD) serves a predominantly rural jurisdiction in Northeast Nebraska consisting of Burt, Cuming, Madison and Stanton Counties. The estimated population of our jurisdiction is 57,002 (US Census 2010); down nearly 5% since 2000. This rounds out to approximately 26 people per square mile. The leading industry is agriculture, with 18.25% of the population working in agriculture. The most populous county is Madison County, with about 35,000 residents (61% of the population). Census numbers show that the median age for health district is above the state average, with a higher proportion of elderly individuals. The health district is also becoming increasingly diverse, particularly with the Hispanic minority group increasing from 6.4% to 11.1% of the total population from 2000 to 2014 (US Census Bureau 2014). According to Behavioral Risk Factor Surveillance System (BRFSS) four year trend data (2011-2014) for the ELVPHD jurisdiction, prevalence of obesity, heart disease, and heart attack are statistically similar to Nebraska averages. These had not changed significantly from 2011-2013. The only category significantly different than the state levels were the portion of the population that had a heart attack, which increased from 3.6% to 6.5% for the area while state levels decreased from 4.1% to 4.0%. Many farm families are uninsured or carry high-deductible insurance with low premiums, just enough to avoid a major financial hardship in the event of illness or injury. According to a National Center for Farmworker Health's (NCFH) report, 46% of farmworkers in the U.S. paid for health care services out of pocket. Only 14% used an employer provided health plan. The Operation Heart to Heart (OHH) program was funded by the AstraZeneca HealthCare Foundation's Connection's for Cardiovascular Health(SM) to improve the cardiovascular health of residents. The initial stated program goal, in early 2013, was as follows: To reduce the incidence of cardiovascular disease and increase health screening opportunities among agricultural laborers by providing innovative cardiovascular health screening opportunities, ongoing case management and tracking, and heart health education. Due to increasing interest in the program, in late 2014, the program goal was modified to include the overall rural population. The primary focus of OHH was the intensive case-management approach to weight loss, heart-health knowledge, and overall cardiovascular disease risk reduction through screening, goal setting and improvement of nutrition and physical activity. Case-management individuals were enrolled for at least a 6-month term and were tracked over a number of variables including cardiovascular health screenings, education scores, and lifestyle improvement indicators. Case management occurred in the client's home or at their work place, according to their preference. The secondary focus of the program was cardiovascular education provided to the general public to improve heart-health knowledge and recruit individuals with increased cardiovascular risk factors into the intensive case management portion of the program. Community education activities included both blood pressure screening and education provided at both agricultural venues and at worksites, as well as general cardiovascular education provided to schools, businesses and the community at large. Out of fourteen program objectives over the life of the program, eleven related to the case management portion of the project. These included objectives on biometric measures, self-reported behaviors, and knowledge changes. The remaining three objectives were relevant to the general community education and included objectives on knowledge changes and blood pressure outcomes. Of the fourteen objectives, twelve were met or exceeded. OHH was successful both in reaching the intended target audience and in improving heart health knowledge and cardiovascular risk-factor reduction. Partnering with rural and agricultural vendors throughout the area was vital to the success in reaching the primary target audience. OHH was able to do so successfully and build each year upon the relationships made with the vendors. Previously established relationships between ELVPHD and local businesses, schools, and agencies also helped OHH be successful in reaching targets for both components of the program. OHH impacted the public health areas of obesity, cardiovascular disease, and healthy lifestyles. Participants were motivated to lead healthier lives and became more knowledgeable about the threats of obesity and cardiovascular disease. The overall impact included increasing the community's knowledge of cardiovascular health and there was direct improvement of cardiovascular risk factors among those participating in case management, community blood pressure education and screening and worksite wellness endeavors. For more information on this program or ELVPHD in general, please visit www.elvphd.org. References: National Center for Farmworker Health's (NCFH) Farmworkers' Health: An Analysis of 2011-2012 National Agricultural Workers Survey Data Nebraska DHHS BRFSS Data http://dhhs.ne.gov/publichealth/Pages/brfss_reports.aspx US Census Quick Facts http://www.census.gov/quickfacts/

Responsiveness and Innovation

A Model Practice must be responsive to a particular local public health problem or concern. An innovative practice must be (1) **new to the field of public health (and not just new to your health department)** OR **(2) a creative use of an existing tool or practice**, including but not limited to use of an Advanced Practice Centers (APC) development tool, The Guide to Community Preventive Services, Healthy People 2020 (HP 2020), Mobilizing for Action through Planning and Partnerships (MAPP), Protocol for Assessing Community Excellence in Environmental Health (PACE EH). Examples of an inventive use of an existing tool or practice are: tailoring to meet the needs of a specific population, adapting from a different discipline, or improving the content.

- Statement of the problem/public health issue
- What target population is affected by problem (please include relevant demographics)
    - What is the target population size?
    - What percentage did you reach?
- What has been done in the past to address the problem?
- Why is the current/proposed practice better?
- Is current practice innovative? How so/explain?
    - Is it new to the field of public health
      OR
    - Is it a creative use of existing tool or practice:
      What tool or practice did you use in an original way to create your practice? (e.g., APC development tool, The Guide to

Community Preventive Services, HP 2020, MAPP, PACE EH, a tool from NACCHO's Toolbox etc.)

- Is the current practice evidence-based? If yes, provide references (Examples of evidence-based guidelines include the Guide to Community Preventive Services, MMWR Recommendations and Reports, National Guideline Clearinghouses, and the USPSTF Recommendations.)

2000 Word Maximum

Please state the Responsiveness and Innovation of your practice (2000 Word Maximum) : *

It is no secret that chronic diseases have been on the rise in the U.S. According to the U.S. Office of Disease Prevention and Healthy Promotion Healthy People 2020 (HP2020), "Heart disease is the leading cause of death in the United States. Stroke is the third leading cause of death in the United States. Together, heart disease and stroke are among the most widespread and costly health problems facing the nation today." According to the U.S. Centers for Disease Control and Prevention (CDC) National Vital Statistics System, ELVPHD's age-adjusted death rate for coronary heart disease is 182.79 per 100,000, higher than both the state and national rates (149.8 and 175 per 100,000, respectively). According to BRFSS data, ELVPHD district had not met the HP2020 goal of 26.9% of the adult population with hypertension; as 31.6% of ELVPHD's population had hypertension. From 2011 to 2013, BRFSS data shows that ELVPHD's population had a similar proportion of overweight and obese people to the state average (although consistently 2-3% higher, this difference was not significant). In 2010, the ELVPHD service area was studied to determine local health risks and found 34.1% of adults were at a healthy weight; worse off than the state rate of 36.7% and national rate of 42% (Community Health Status Assessment Summary and Findings Provided by WSC, 2010). Chronic disease is a problem felt by all demographics, however the elderly, low income, and those with less formal education are more likely to have high blood pressure and high cholesterol (CDC Health Disparities and Inequalities Report, 2013). Diabetes rates and the rate of overweight/obese people in our jurisdiction are relatively similar across demographics. Operation Heart to Heart case management services were open for any adult interested; however, concentration was placed on those involved in the agricultural industry, either as owners/operators, or as employees of owners/operators. As such, recruitment efforts concentrated on ag-related events and venues. As the general public began to show increasing interest, worksites and employers were also recruited. The leading industry is agriculture, representing 20.5% of activity, with 18.25% of the population working in agriculture. Many farm families are uninsured or carry high-deductible insurance for lower premiums, just enough to avoid a major financial hardship in the event of a major illness or injury. Because of this, farm families are generally less-frequent consumers of healthcare and/or traditional, clinic-based health screenings. With this in mind, the Operation Heart to Heart program was designed to offer flexibility and convenience for the agricultural sector. The target population, then, were adults in Madison, Stanton, Cuming, or Burt Counties; or about 42,900 in 2013 when the program began. Throughout the program, 5,650 non-duplicated participants (about 13.2% of the target population) were reached. Although data specific to our target population (agricultural workers specifically) is not widely available, BRFSS data from 2011-2014 showed a significantly higher proportion of people who had no personal doctor or health care provider when compared to the state average (in 2012, the year before the initiation of the program, ELVPHD's percentage of people with no health insurance coverage was 24.2% compared to the state average of 17.2%). The year of 2012 also had significantly less people who noted that they had a routine check-up in the past year compared to the state (52.4% noted having received a routine check-up, compared to 60.4% for the state). As noted before, agricultural workers are more likely to be uninsured or have to pay more out of pocket for routine services due to deductible reasons. It is likely, then, that this population is less likely to have no personal health care provider or go longer periods of time without routine check-ups. This program was aimed at reducing this very disparity. Although there have been cardiovascular risk-reduction programs in the service area in various capacities in recent years, ELVPHD was unaware of any that had been specifically targeted to the agricultural worker population. Short of health fairs or other short-term screening pushes, no large-scale or long-term effort had been made for this large segment of the population. Operation Heart to Heart's innovation showed in the implementation of a case management-based program for agriculture workers who do not typically have the easiest access to health care and health services. In addition to the innovation with regard to reaching the primary target population (agricultural/rural residents), Operation Heart to Heart was also innovative in its design to reach individuals via their worksites. Worksite wellness has existed in the area on a limited basis with a couple of select health care agencies. However, under those agencies, the focus had primarily been exclusive to bloodwork screening services. Implementation of the Operation Heart to Heart case-management/health-coaching model, with the goal of weight reduction and cardiovascular risk reduction, was a notable and necessary competitive edge over the existing worksite wellness services. Operation Heart to Heart's innovation brought together not only the biometric screening aspect, but also case-management/wellness-coaching to ensure that weight reduction and cardiovascular risk factor improvement was central to the program, with the intention of achieving a sustained health benefit to by far exceed the life of the case management services. The proposed practice, Operation Heart to Heart, was beneficial for the rural setting of the health district because it targeted not only a hard to reach and under-served element of the population (agricultural workers), but also capitalized upon reaching the secondary target individuals (employees at worksites) where they normally gather without having the individuals have to go out of their way to access the services. Agricultural outlets, events and worksites allowed people to receive services in a manner that did not require extra scheduling, time off of work, or extra effort on the part of the participant and allowed those individuals to access the services in their normal and convenient peer groups. The Operation Heart to Heart program was modeled around two recommended practices as per The Community Guide to Preventative Services. According to The Community Guide, interventions which utilize community health workers to engage the community in cardiovascular disease prevention are recommended. With regard to the Operation Heart to Heart program, public health nurses and/or educators were utilized to engage with the agricultural worker population in environments in which they were already gathered to screen and educate individuals regarding cardiovascular risk factor reduction and enroll high cardiovascular risk individuals into intensive case management services. The public health nurses/educators would then provide customized home or workplace visitation services to ensure continued engagement and heightened success in the program. According to case management participants, one appealing element of the program design was the partnership between Operation Heart to Heart staff and the numerous agriculture-related outlets. Because the agricultural venues allowed the public health nurses/educators to operate at their outlets and events to access potential clients, participants were more apt to have trust in the program due to the collaborative alignment as many of the clients placed validity in the program with a mindset that 'the business that I patronize only sponsors reputable and

worthwhile programs.' With this in mind, convincing clients to participate was not a challenge. The second Community Guide-recommended practice that was incorporated into the Operation Heart to Heart program was the practice of utilizing worksite wellness for the purposes of improving diet and/or physical activity behaviors for weight reduction. By accessing worksites, Operation Heart to Heart was able to screen and educate individuals regarding cardiovascular risk-factor reduction at their normal gathering place. The screening and health coaching/case management of Operation Heart to Heart remained the same as with the agricultural workers; however, the delivery was tailored to the worksite's preferences. In general, education was provided via group format to the employees and then health coaching/case management and screening services were provided individually between each employee and the public health nurse and/or health educator. This allowed for privacy to discuss personal matters, health questions, and to customize coaching sessions based upon the individualized needs of each participant. In addition to the two Community Guide to Preventative Services recommended practices that were incorporated into the program, Operation Heart to Heart's educational curriculum was the American Heart Association's "Life's Simple 7". The curriculum includes the following topics: Manage Blood Pressure, Control Cholesterol, Reduce Blood Sugar, Get Active, Eat Better, Lose Weight, and Stop Smoking. Utilizing Life's Simple 7 standardized the messaging that was provided to each case management/health coaching participant and ensured that all enrollees were provided accurate, medically-sound information from a trusted and reputable health authority. Though based off of the above practices, this practice did not reach the criterion of an evidence based practice. References American Heart Association. My Life Check- Life's Simple 7. http://www.heart.org/HEARTORG/ Centers for Disease Control and Prevention, National Vital Statistics System. Accessed via CDC WONDER. 2009-13. Source Heart Disease Mortality, Age-Adjusted Death Rate (Per 100,000 Pop.) Centers for Disease Control and Prevention, Morbidity and Mortality Weekly Report. CDC Health Disparities and Inequalities Report—United States, 2013 HealthyPeople.gov. Heart Disease and Stroke https://www.healthypeople.gov/2020/topics-objectives/topic/heart-disease-and-strokev Nebraska DHHS BRFSS Data http://dhhs.ne.gov/publichealth/Pages/brfss_reports.aspx The Community Guide to Preventative Services. https://www.thecommunityguide.org/

LHD and Community Collaboration

The LHD should have a role in the practice's development and/or implementation. Additionally, the practice should demonstrate broad-based involvement and participation of community partners (e.g., government, local residents, business, healthcare, and academia). If the practice is internal to the LHD, it should demonstrate cooperation and participation within the agency (i.e., other LHD staff) and other outside entities, if relevant. An effective implementation strategy includes outlined, actionable steps that are taken to complete the goals and objectives and put the practice into action within the community.

- Goal(s) and objectives of practice
- What did you do to achieve the goals and objectives?
    - Steps taken to implement the program
- Any criteria for who was selected to receive the practice (if applicable)?
- What was the timeframe for the practice
- Were other stakeholders involved? What was their role in the planning and implementation process?
    - What does the LHD do to foster collaboration with community stakeholders? Describe the relationship(s) and how it furthers the practice goal(s)
- Any start up or in-kind costs and funding services associated with this practice? Please provide actual data, if possible. Otherwise, provide an estimate of start-up costs/ budget breakdown.

5000 words maximum

Enter the LHD and Community Collaboration related to your practice (5000 words maximum): *

Operation Heart to Heart's primary goal was: To reduce the incidence of cardiovascular disease and increase health screening opportunities among agricultural laborers in Burt, Cuming, Stanton and Madison Counties in Nebraska by providing innovative cardiovascular health screening opportunities, ongoing case management and tracking, and heart-health education. In 2014, the program goal was modified to expand the target audience to include the rural population overall, in addition to worksites. There were fourteen specific objectives of the project. Of the fourteen, eleven were relevant to the case management/health coaching aspect of the project and three were specific to the general community education element of the program. The objectives were as follows: 1. Case Management: a. 30% of case management participants who are overweight / obese will reduce their body mass Index by at least one point from baseline to conclusion. 2. Case Management: a. 30% of case management participants with elevated blood pressure at baseline will have at least a 5 point improvement in either systolic or diastolic numbers at the conclusion. 3. Case Management: a. 50% of case management participants will have a reduction in triglycerides by at least 10 point from baseline to conclusion. 4. Case Management: a. 30% of case management participants will have a reduction in glucose by at least 10 points from baseline to conclusion. 5. Case Management: a. 30% of case management participants with elevated body mass index at baseline will lose at least 5% of their body weight by program conclusion. 6. Case Management: a. 30% of case management participants will self-report increasing their physical activity from baseline to conclusion. 7. Case Management: a. 30% of case management participants will self-report increasing their average daily fruit and/or vegetable intake from baseline to conclusion. 8. Case Management: a. 60% of case management participants will remain enrolled in the program for at least 6 months. 9. Case Management: a. 75% of case management participants will achieve at least one individually set lifestyle improvement goal by program conclusion. 10. Case Management: a. Case management participants will reflect at least a 10% knowledge increase from baseline to post-test on the nutrition education module. 11. Case Management: a. Case management participants will reflect at least a 10% knowledge increase from baseline to post-test on the cardiovascular disease education module. 12. General Community: a. 70% of educational presentation participants will reflect an

increase in knowledge from pre to post-test (of those who did not have 100% at baseline). 13. General Community: a. 75% of blood pressure education participants who were unable to indicate a normal blood pressure value at the pre-test, will be able to indicate normal blood pressure value at post-test. 14. General Community: a. At least 20% of blood pressure screened and tracked participants with an initially high blood pressure value will have at least a 5 point improvement in either systolic or diastolic from their first to final measure. The program can effectively be divided into providing two levels of service: 1). Case management/health coaching services; and 2). General community education. For case management, there were many activities identified to prepare for and implement the program. The essential steps for the case management implementation included: 1. Case management identification algorithm was created by program staff and subsequently underwent review by Elkhorn Logan Valley Public Health Department's medical director—a local family-practice physician. The algorithm determines appropriate case management selection criteria based upon heart health screening measures conducted at public agriculture-related events. 2. Program staff created the Operation Heart to Heart Advisory Council with relevant health care partners in the health district to provide insight on the program parameters and clinical input as needed/requested. The Advisory Council was made up five individuals representing the three hospitals in Elkhorn Logan Valley Public Health Department's health district, plus an independently-operated cardiology clinic operating in the health district. The Advisory Council reviewed the recommended materials prior to implementation and provided input and recommendations regarding the overall program design. The Council met approximately quarterly to review program status and outcomes and to collaborate on community endeavors related to the program. 3. Program staff determined Operation Heart to Heart program objectives in collaboration with the external evaluator—a privately-contracted research firm with Ph.D.-level staff and extensive experience in program fidelity, identification and creation of evaluation instruments and tools, and identification of outcome measures. This evaluator reviewed Operation Heart to Heart in its entirety prior to program implementation. The external evaluator assisted with report completion annually for the funder and provided an additional comprehensive program evaluation report for Elkhorn Logan Valley Public Health Department to share with Advisory Council members and other public health stakeholders. 4. Program staff created the Operation Heart to Heart branding and incorporated the program name and relevant branding when promoting the program to assist with name recognition and building trust in the program. 5. Program staff reviewed multiple curriculum to be considered for case management modules. After extensive review and research, and with approval from the Advisory Council, program staff selected The American Heart Association's Life's Simple 7 as the educational curricula for case management modules. 6. Program staff sought collaborations among ag-related agencies and/or ag-event organizers as a means to reach the intended target audience. Numerous collaborations were established with: farm show events, pesticide training instructors, county extension offices, health care entities, community college ag-related events, city chamber of commerce events, agricultural retail outlets, grain elevators, feedlots, livestock auction companies, etc. 7. Program staff sought collaborations with businesses and employers in the area to access employees via worksite wellness. 8. Supplies were ordered by program staff, including blood work screening supplies, educational materials, blood pressure machines, and more. 9. Agricultural events were attended by program staff and initial screenings were provided to attendees. The public health nurse/health educator discussed the screening results on the spot, and case management/health coaching services were offered to those deemed appropriate as per the case management identification algorithm. 10. Program staff enrolled individuals voluntarily into case management services, as per the clients' preference. Most often, this was done via telephone by the public health nurse following a health screening event. 11. Once enrolled, participants completed self-assessment tools regarding their self-perceived health habits, nutrition habits and physical activity indicators; at least one lifestyle goal was established by the client (and supported by the public health nurse/case manager) and monthly Life's Simple 7 modules were completed, generally one-on-one between the client and case manager. One of the program objectives was to have each individual stay enrolled for at least six months to assist with establishing sustained lifestyle changes and tracking progress over time. 12. By program design, each case management participant received at least two bloodwork screenings by the public health nurse (one at baseline and one at the conclusion of their Life's Simple 7 modules), at least 6 educational modules by either a public health nurse or health educator, behavioral assessments at baseline and conclusion of the program, program satisfaction assessment and an individualized progress report prepared by the public health nurse/health educator based upon changes/improvements in the client's personal biometric indicators, assessments and pre- or post-tests. 13. Worksite wellness participants followed the same basic program design as agricultural workers case management enrollees (as indicated above), except that all employees interested at a worksite are provided case management services rather than selected enrollment based upon biometric measures and or risk factors. 14. The Operation Heart to Heart program model was shared with other organizations with the intention of assisting those with a roadmap for implementation within their jurisdictions. Venues in which the program model was shared included: local health departments in Nebraska on an individual basis as requested, 2014 Public Health Association of Nebraska conference, lessons learned were shared with the AstraZeneca HealthCare Foundation's Connections for Cardiovascular Health(SM) group for their report for future grantees and with the University of Nebraska Medical Center for a rural cardiovascular health project in which funding was being applied for to implement a similar project. The essential steps for the general community education implementation included: 1. Program staff selected American Heart Association's Life's Simple 7 presentation modules for community education presentations. 2. Program staff discussed the intent of the general-community education component with the Operation Heart to Heart Advisory Council and sought input throughout the project on accessing community venues and updated the Advisory Council periodically regarding community education provided. 3. Program staff reviewed the community education pre- and post-testing instruments with the program evaluator and created appropriate tracking devices to ensure measureable and accurate outcome tracking. 4. Program staff established collaborations with schools, businesses, civic groups, community-event organizers and various other organizations as venues for presenting general cardiovascular education. 5. Program staff implemented the Life's Simple 7 (and other related cardiovascular health) presentations at venues throughout the service area over the life of the project. In doing so, program staff tracked outcomes via pre- and post-testing instruments and reported on outcomes annually. This program officially began in November of 2012, and the first few months were utilized to prepare for implementation of the case-management/health-coaching and community education aspects of the program. The first participants were recruited into the program in early 2013, and program funding (from the AstraZeneca HealthCare Foundation's Connections for Cardiovascular Health(SM)) continued into 2016. Participants for case management services were recruited at agriculture-related events and businesses for the first two years, and then in the third year, recruitment was expanded to include worksites and rural residents, in general, that resided (or worked) within the jurisdiction. The program began with health screenings pertaining to several cardiovascular risk indicators. If it was determined that a potential participant had an increased risk of cardiovascular disease, he or she was

encouraged to enroll in the case management program. The general community education portion of the project was open to any business, school, civic group, or organization in the four-county area, with that portion of the program's overall goal focusing to increase the community's cardiovascular health knowledge. Stakeholders for this practice included multiple businesses and community organizations, schools, civic groups, as well as others. A notable stakeholder group included a five-member Operation Heart to Heart Advisory Council—made up of individuals representing the health district's three hospitals and one independent cardiovascular clinic. The Advisory Council met approximately quarterly and provided input on the design of the program materials and input regarding implementation steps. In addition, the Advisory Council membership organizations also partnered with the health department on some large-scale community education events hosted by the Operation Heart to Heart project. Agricultural-related businesses and event organizers also were essential stakeholders. The businesses allowed Operation Heart to Heart to participate in their organizations' community events. Many of them also hosted Operation Heart to Heart at their businesses and allowed program staff to provide screenings and education to their business patrons. The collaborations were instrumental as this greatly assisted program staff with recruiting and enrollment efforts into case management. Finally, schools, community events and worksites collaborated with the project to allow Operation Heart to Heart program staff to reach over 5,000 individuals in the jurisdiction to receive heart-health education and blood pressure screening and education. Collaborating with Operation Heart to Heart provided a mutual benefit to the businesses, schools and organizations. Businesses have an intrinsic interest in their workers' health and wellness, and this provided a mutually-beneficial platform for Operation Heart to Heart to reach their employees for case-management and/or heart-health education. In addition, Operation Heart to Heart's education and screenings was viewed as an enhancement to agricultural event organizers because screening and education services provided a value-added service to farmers and agricultural-workers attending the events. Finally, schools recognized the importance of Operation Heart to Heart providing heart-health education to students. Operation Heart to Heart began as a grant-funded project through AstraZeneca HealthCare Foundation's Connections for Cardiovascular Health(SM). The total funding was $750,000 and was distributed at $250,000 per year for 3 years. A primary focus area of the funding was to ensure sustainability measures for the programming. To ensure that the essential case-management proportion of the program would reach sustainability to the highest extent possible, the health department implemented several measures: 1). Program staff completed insurance-billing credentialing and secured provider status from major insurance companies. This allowed Elkhorn Logan Valley Public Health Department to bill insurance for the cardiovascular screening services provided, 2). Program staff modified the overarching focus of the program in year 2 and beyond to be inclusive of worksites; and 3). Program staff established relationships with businesses and organizations throughout the life of the program to ensure that those connections were in place prior to the start-up funding drawing to a close. Because worksites were considered paramount to the ongoing success of the program, much emphasis was placed upon marketing the program as a business fee-for-service worksite wellness venture in year 3.

Evaluation

Evaluation assesses the value of the practice and the potential worth it has to other LHDs and the populations they serve. It is also an effective means to assess the credibility of the practice. Evaluation helps public health practice maintain standards and improve practice. Two types of evaluation are **process** and **outcome**. Process evaluation assesses the effectiveness of the steps taken to achieve the desired practice outcomes. Outcome evaluation summarizes the results of the practice efforts. Results may be long-term, such as an improvement in health status, or short-term, such as an improvement in knowledge/awareness, a policy change, an increase in numbers reached, etc. Results may be quantitative (empirical data such as percentages or numerical counts) and/or qualitative (e.g., focus group results, in-depth interviews, or anecdotal evidence).

- What did you find out? To what extent were your objectives achieved? Please re-state your objectives.
- Did you evaluate your practice?
    - List any primary data sources, who collected the data, and how (if applicable)
    - List any secondary data sources used (if applicable)
    - List performance measures used. Include process and outcome measures as appropriate.
    - Describe how results were analyzed
    - Were any modifications made to the practice as a result of the data findings?

2000 Words Maximum

Please enter the evaluation results of your practice (2000 Words Maximum): *

Operation Heart to Heart's primary focus was to improve the heart health of residents in the Elkhorn Logan Valley Public Health Department service area. The specific objectives of the program were largely outcomes-based and there were multiple specific indicators to determine success of the project. Overall, the process evaluation indicators included: 1). Program staff reaching the target audience for the two programmatic areas of case management and general community education and 2). Program staff tracking at least 1,500 individuals per year for each of the three funded years. Each of the process evaluation indicators were met as the target audience of rural and/or agricultural workers was achieved for those in case management and the project tracked 5,650 non-duplicated individuals over the three year time period (exceeding the goal of 4,500 individuals over 3 years). In all, OHH served 161 clients in case management services. These case management clients received services for a maximum of twelve months. New clients were recruited between each year, so that no participants were duplicated throughout the life of the program. Outcome evaluation: Since cardiovascular health is affected by multiple factors, this practice kept track of many measures throughout the life of the program. Out of fourteen key indicators set for this program, twelve of the measures were successfully met by the completion of the program. The table below indicates the specific objective and the corresponding outcome achieved in bold directly following. The outcomes for each objective represent four years of compiled data from four case management cohorts, as well as the three years of general community education measures. 1. Case Management a. 30% of case management participants who are overweight / obese will reduce their body mass Index by at least one point from baseline to conclusion. i. 38.6% reduced their BMI by at least one point. b. 30% of case management participants with elevated blood pressure at baseline will have at least a 5-point improvement in either systolic or diastolic numbers at the conclusion. i. 69.4% achieved at least a 5-point improvement in systolic and/or diastolic blood pressure measures. c. 50% of case management participants will have a reduction in triglycerides by at least 10 point from baseline to conclusion. i. 62% achieved at least a 10-point reduction in triglycerides. d. 30% of case management participants will have a reduction in glucose by at least 10 points from baseline to conclusion. i. 23% achieved at least a 10-point reduction in glucose (this measure did not achieve the 30% target). e. 30% of case management participants with elevated body mass index at baseline will lose at least 5% of their body weight by program conclusion. i. 18.5% achieved a 5% reduction in body weight (this measure did not achieve the 30% target). f. 30% of case management participants will self-report increasing their physical activity from baseline to conclusion. i. 35.7% self-reported increasing their physical activity as a result of the program. g. 30% of case management participants will self-report increasing their average daily fruit and/or vegetable intake from baseline to conclusion. i. 45.1% self-reported increasing their average daily fruit and/or vegetable intake as a result of the program. h. 60% of case management participants will remain enrolled in the program for at least 6 months. i. 74.5% of case management participants remained enrolled in the program for at least 6 months. i. 75% of case management participants will achieve at least one individually-set lifestyle improvement goal by program conclusion. i. 82.3% achieved at least one individually set lifestyle improvement goal. j. Case management participants will reflect at least a 10% knowledge increase from baseline to post-test on the nutrition education module. i. Knowledge increased by 13.3% for the nutrition module from baseline to post. k. Case management participants will reflect at least a 10% knowledge increase from baseline to post-test on the cardiovascular disease education module. i. Knowledge increased by 17.1% for the cardiovascular disease module from baseline to post. 2. General Community a. 70% of educational presentation participants will reflect an increase in knowledge from pre to post-test (of those who did not have 100% at baseline). i. 81.6% of general community education participants reflected an increase in knowledge from baseline to post. b. 75% of blood pressure education participants who were unable to indicate a normal blood pressure value at the pre-test will be able to indicate a normal blood pressure value at post-test. i. 91.3% of general community blood pressure education participants (who were unable to state ideal blood pressure value at baseline) were able to at post. c. At least 20% of blood pressure screened and tracked participants with an initially high blood pressure value will have at least a 5 point improvement in either systolic or diastolic from their first to final measure. i. 32.5% of general community blood pressure screening participants with an initially high blood pressure value had at least a 5 point improvement in systolic and/or diastolic to final measure. Evaluation specifics: Data was collected on-site via participant surveys, pre- and post-testing instruments, and satisfaction surveys. Surveys and pre- and post-tests were entered by Elkhorn Logan Valley Public Health Department staff into Microsoft Excel spreadsheets and participants were tracked to ensure non-duplication of individuals. The data sheets were sent for yearly evaluation to a contracted research firm; Ionia Research. The complete and final evaluation report (combining all of the Operation Heart to Heart data years) was completed in-house through Elkhorn Logan Valley Public Health Department. The following secondary references were used for comparative data throughout the program: American Fact Finder, Behavioral Risk Factor Surveillance System (BRFSS) Survey, Robert Wood Johnson's County Health Rankings & Roadmaps, and U.S. Census Bureau American Community Survey 5-Year Estimates and QuickFacts. These sources were used in annual reporting for the program to monitor program progress and relevance. A performance management system was designed and implemented at Elkhorn Logan Valley Public Health Department for all programs in the fall of 2013. Performance measures for the Operation Heart to Heart program were set at that time (fall of 2013) as the fourteen program objectives noted above. With the implementation of the performance management system at Elkhorn Logan Valley Public Health Department in the fall of 2013, program coordinators and leadership were able to review data on a quarterly basis to monitor progress toward achieving the objectives, whether progress was on track or falling outside of the objective's target. Because the project was performing at or near the level set forth in the program objectives, significant changes were not made to the program design or implementation parameters. However, in years 2 and 3 of the program, modification were made to the case management client satisfaction instrument with regard to collection methods in response to suggestions from the project coordinators to increase satisfaction survey participation from the case management enrollees. The Operation Heart to Heart annual evaluation reports were shared with the Operation Heart to Heart Advisory Council, AstraZeneca HealthCare Foundation's Connections for Cardiovascular Health(SM) group and their evaluators (eventually featured in their annual report), the Elkhorn Logan Valley Public Health Department Board of Health, and was shared with the public via the Elkhorn Logan Valley Public Health Department's website (on the heart health page) for the general community.

Sustainability

Sustainability is determined by the availability of adequate resources. In addition, the practice should be designed so that the stakeholders

are invested in its maintenance and to ensure it is sustained after initial development (*NACCHO acknowledges that fiscal challenges may limit the feasibility of a practice's continuation*.)

- Lessons learned in relation to practice
- Lessons learned in relation to partner collaboration (if applicable)
- Did you do a cost/benefit analysis? If so, describe.
- Is there sufficient stakeholder commitment to sustain the practice?
    - Describe sustainability plans

1500 Words Maximum

Please enter the sustainability of your practice (2000 Words Maximum): *

This project was funded, in large part, by grant funds provided by the AstraZeneca HealthCare Foundation's Connections for Cardiovascular Health(SM). This provided the necessary start-up funds for a project of this scale. The total project funding (over the 3 year period) was $750,000. This amount of funding was able to provide enough resources to not only implement the primary focus of the program, (case management) but also to ensure large-scale community education. There were several lessons learned over the life of the Operation Heart to Heart project including: 1. Data collection and review are paramount to any project on the scale of Operation Heart to Heart (with over 5,000 tracked individuals). It is advised that thorough planning and thought be included in the design and structure of the data collection tracking devices to ensure for more seamless data review and evaluation. The Operation Heart to Heart data tracking spreadsheets received structural modifications in year 2 of the project to assist with more user-friendly review of the data by the project staff and evaluation team. 2. By and large, the most impactful outcomes associated with the project were associated with the case management portion of the project. A recommendation would be that general community education be largely limited for use as a recruitment strategy rather than focusing intense efforts on the tracking and data review associated with general community education. 3. Collaborating with numerous organization (ag-outlets, ag-related event organizers, businesses and organizations) contributed greatly to the success of Operation Heart to Heart. It is recommended that similar projects model their efforts after Operation Heart to Heart and build the relationships necessary to ensure multiple collaborations with community partners. The collaborations of this project provided credibility for the project in year 1 when it was unknown in the community and allowed for the project staff to initiate relationships more easily with the target audience. Determining the cost-benefit analysis of the Operation Heart to Heart program is based largely upon reduced health care costs as a result of preventable cardiovascular events. The premise of Operation Heart to Heart's case management program was to reduce the cardiovascular risk of the participants. Numerous biometric measures were used to determine the participant's progress at reducing their risk including tracking and determining progress made in the following areas: body mass index reduction, weight reduction, blood pressure improvement, glucose measure reduction and improvements made with HDL, LDL, Triglyceride measures. According to the American Heart Association, cardiovascular diseases (CVD), including heart disease and stroke, are the leading cause of death and disability in the U.S. CVD can often be prevented and risk factors reduced through lifestyle change programs such as Operation Heart to Heart. According to a June 2011 paper by the American Heart Association and American Stroke Association entitled "An Ounce of Prevention…The Value of Prevention for Cardiovascular Diseases" the following statements reflect the economic important of cardiovascular disease prevention: 1. Men and women who lower their risk factors may have 79-82% fewer heart attacks and strokes than those who do not reduce their risk factors. 2. Approximately 67% of the decline in U.S. age-adjusted coronary heart disease (CHD) death rates from 1980-2000 can be attributed to improvements in risk factors including reductions in total blood cholesterol, systolic blood pressure, smoking prevalence, and physical inactivity. Regarding actual economic impact, The Agency for Healthcare Research and Quality's (AHRQ) November 2012 Statistical Data Brief #393 noted the following annual average medical expenditures for people with and without cardiovascular disease: a. $1,884 - Average adult annual medical expenditures b. $7,026 – Average adult annual medical expenditures with heart disease c. $14,627 – Average adult annual medical expenditures with heart disease and another chronic condition According to the economic data above, the increased annual medical expenditures per adult with heart disease is approximately $5,142 more than an adult without heart disease (7,026 - $1,884 = $5,142). Therefore, for adults that are able to reduce their cardiovascular risk factors, the potential direct health care related cost savings could potentially be $5,142 per year. In the case of the 161 case management participants served during the program, there was a potential of 161 participants x $5,142 = $827,862.00 saved annually. Actual savings would depend upon many factors including the individuals overall health, genetics, and their ability to achieve and sustain CVD risk factor reductions, etc. Because there were numerous positive health outcomes among the case management participants, it is anticipated that overall the health of the 161 case management individuals has reduced their CVD risk factors. Conservatively, if just 20% of the 161 case management participants reduced their CVD risk factors in order to prevent a heart disease diagnosis for at least 5 years then the savings attributed to that reduction would be: 161 x 20% = 32 participants x $5,142 annual health savings = $164,544 x 3 years = $493,632 saved over 3 years. The total budget for Operation Heart to Heart was $750,000 over 3 years; however, approximately half of the total budget was set aside for general public education. Therefore, approximately $375,000 of the total $750,000 budget was utilized for case management services. Looking at overall cost-benefit only over the three year period, conservatively the net benefit would be $493,632 cost savings benefit - $375,000 Operation Heart to Heart program cost = $118,632 net benefit. It was determined by Elkhorn Logan Valley Public Health Department that the essential component of the program to be sustained was the case management services, as that aspect of the program provided the most notable and longer-term outcomes. While still in the funding period, Elkhorn Logan Valley Public Health Department took measures to ensure that the case management portion of the program would be viable as a sustainable service of the health department. Becoming credentialed with most major insurance companies allowed for the health department to continue cardiovascular screening services. In addition, building ongoing relationships with employers and organizations over the life of the project allowed for Elkhorn Logan Valley Public Health Department to position the Operation Heart to Heart program as a worksite wellness venture that was sustainable via insurance billing (for screening and health coaching services) or as a fee-for-service worksite wellness program. References American Heart Association, American Stroke Association. An Ounce of Prevention… The Value of Prevention for Cardiovascular Disease. 2014. https://www.heart.org/idc/groups/heart-public/@wcm/@adv/documents/downloadable/ucm_461177.pdf Uberoi, N. and Cohen, J., Expenditures for Heart Disease among Adults Age 18 and Older: Estimates for the U.S. Civilian Noninstitutionalized Population, 2009, Statistical Brief #393. November 2012. Agency for Healthcare Research and Quality, Rockville, MD. http://meps.ahrq.gov/mepsweb/data_files/publications/st393/stat393.pdf

Additional Information

How did you hear about the Model Practices Program:: *

- [ ] I am a previous Model Practices applicant
- [ ] At a Conference
- [ ] NACCHO Website
- [ ] Public Health Dispatch
- [x] Colleague in my LHD
- [ ] Model Practices brochure
- [ ] NACCHO Exhibit Booth
- [ ] NACCHO Connect
- [ ] Colleague from another public health agency
- [ ] E-Mail from NACCHO
- [ ] NACCHO Exchange