# Essential Attributes of Wellness and Prevention Programs in Rural Latino Communities

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**Abstract / Resumen**

This paper describes four ongoing projects that promote wellness and prevention through health education for medically underserved Latino agricultural workers in four counties in California. These projects were developed in response to a grant initiative offered by the County Medical Services Program and The California Endowment. The programmatic aspects of project design and descriptions of the resulting individual projects are reported. Essential attributes found in all four projects — cultural and linguistic competence, collaboration with the health provider community, and extensive inreach and outreach efforts—are highlighted and discussed. Initial evaluation information indicates that these projects are functioning successfully, although challenges to project implementation have occurred. Procedures developed for the evaluation of project impacts are discussed.

Este papel describe cuatro proyectos en curso que promuevan salud y la prevención a traves la educación de salud para trabajadores Latinos de agricultura que son médicamente poco servidas en cuatro condados en California. Estos proyectos fueron desarrollados en respuesta a una iniciativa de concesión ofrecida por el programa County Medical Services Program y El California Endowment. Los aspectos programáticos del diseño del proyecto y descripciones de los proyectos individuos que resultan se revelan. Atributos esenciales encontrados en los cuatro proyectos - la competencia cultural y lingüística, la colaboración con la comunidad del proveedor de salud, y el esfuerzo extensivo de servicio especial de asistencia pública - estan resaltados y discutidos. La información inicial de la evaluación indica que estos proyectos están funcionando existosamente, aunque los desafíos para proyectar la puesta en práctica han ocurrido. Los procedimientos desarrollados para la evaluación de los impactos del proyecto se discuten.

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## Introduction

The philosophy behind public health programs or interventions that are targeted to indigent populations is that individuals who are poor have a greater risk of disease onset due to excessive individual, environmental and community risk factors. Lower socioeconomic status has been associated with poor health functioning (Hemingway, 1997), although its effect may vary depending on the health outcome measured and the community in which the individual resides (Karpati, Galea, Awerbuch, & Levins, 2000).

Recent data suggest that working minorities, especially Latinos, are more likely to live in poverty and have relatively poor health status even after accounting for age, sex, and education level (Institute for Health Policy Studies, 2000). Persons of Hispanic or Latino origin make up nearly 33% of all Californians (U.S. Census Bureau, 2000a). Inadequate access to health care and inefficient use of health care services

contribute to disproportionately higher rates of chronic disease such as hypertension, diabetes, HIV, and alcoholism among Latinos (Council on Scientific Affairs, 1991; Novello, Wise, & Kleinman, 1991). Differences in access to health care are the result of several factors including inadequate insurance coverage, higher rates of poverty, and cultural and linguistic barriers to accessing the health care system (Baker, Boulkin, Durham, Lowell, Gonzalez, Adams et al., 1997). Problems of access are further exacerbated for Latinos in rural areas where there is a scarcity of primary care and specialty providers, fewer clinics and hospitals, lack of public transportation, and large geographic distances to cover in order to obtain basic services.

Some public sector health programs have begun to embrace wellness and prevention activities as a way to mitigate the effects of disease and ultimately reduce costs by preventing and controlling chronic illnesses such as diabetes, asthma, and heart disease. Wellness and prevention programs generally do not generate immediate cost savings because they must initially spend more in other areas such as laboratory tests, increased prescriptions, increased outpatient provider visits, and health education programs (Benko, 2002). However, through appropriate health education, wellness and prevention programs can maintain or improve individuals' health and reduce emergency room visits and inpatient hospitalizations (Lorig, Sobel, Stewart, Brown, Bandura, Ritter et al., 1999).

Information compiled by the Centers for Disease Control and Prevention suggests that incorporating knowledge of the language, cultural values, and norms of target communities is essential when trying to bridge the gap between public health agencies and the communities they serve (Centers for Disease Control & Prevention, 1994). As a prerequisite for success, health education and promotion activities should include the same principles of being culturally and linguistically appropriate to convey information effectively and to successfully develop individuals' self-efficacy that will ultimately facilitate long-term behavior change. In order to reach the various Latino communities in California, the public health community has relied upon a combination of community health workers/educators, cross-cultural training of providers, and the use of Latino health professionals to provide culturally and linguistically appropriate services to underserved communities. Innovative strategies that incorporate lay or community health workers who are responsive to cultural norms and values and who are grounded in local needs have been shown to be effective in improving access to health care, increasing the use of preventative services, and facilitating behavior change (Baker, et al., 1997; Barnes & Fairbanks, 1997; Bird, Otero-Sabogal, Ha, & McPhee, 1996).

The County Medical Services Program (CMSP) Wellness and Prevention Program (W&PP) is a five-year grant designed to provide 34 counties with funds to encourage prevention activities for poor and medically underserved adults in rural communities. The main objectives of the grant are to: 1) promote wellness and prevention activities in rural communities, 2) support collaboration among public agencies and community-based service providers, and 3) allow and encourage local communities to develop and design their own wellness programs.

This paper reports on the development and implementation of CMSP's W&PP and specifically discusses four W&PP grantees that have developed health education programs targeted to both migrant and non-migrant Latino populations in four diverse counties of California: Imperial, San Benito, Sonoma, and Tehama. This article uses the term "Latino(s)" to describe members of the communities being served by the grant because the target groups include Mexican nationals, Central and South American nationals, and Mexican-Americans. The specifics of each community and target population such as "border community", "seasonal farm worker", etc… are expressed within the program descriptions. The attributes of these health education efforts, common to all four sites and integral to the success of the

various interventions, will be described and discussed in the following sections.

**Method**

The CMSP is a public entity that provides health coverage to indigent adults between the ages of 21 to 64 years in 34 rural and semi-rural participating counties. Eligibility determination for potential CMSP clients is administered locally by each county's Human Services Agency. Counties participating in the CMSP are demographically, geographically, and economically diverse and encompass all regions of California, including Imperial County which borders Mexico; many of the counties in the Central Valley, including Kings and Madera; Inyo and Mono Counties to the east; and nearly every county north of Sacramento. The mission of CMSP is to help assure the delivery of timely and high quality primary, preventive outpatient, and inpatient health care services to indigent adults. Delivery of these services is intended to address preventable health conditions and remediate illness and injury so individuals may improve and sustain their health. The CMSP also provides emergency services, and follow-up services related to an emergency, for undocumented individuals in the 34 participating CMSP counties.

In 1999, the CMSP Governing Board and The California Endowment (TCE) designed a grant program intended to strengthen community capacity for decision making, provide opportunities to change the delivery of community-based health services, and assist counties in securing future resources for sustaining effective programs. In order to achieve these goals, Wellness and Prevention Program grants were made available to all participating CMSP counties and were designed to proactively address the current health needs of CMSP beneficiaries, and other medically needy, in order to avoid catastrophic care and its associated social, emotional, and economic costs.

Initial funding came from the CMSP Governing Board, which provided $4 million for W&PP grants that occurred between 1999 and 2001. The California Endowment contributed an additional $8.5 million to support grant activities from 2000 through 2004. Approximately $6 million dollars is being distributed to organizations and agencies in 33 of the 34 CMSP counties participating in the final cycle of grants that began in March 2001 and will be complete in April of 2004 (County Medical Services Program Governing Board Web site, 2003, grant awards). Grants were intended to 1) promote wellness and prevention activities in rural communities, 2) support collaboration among public agencies and community-based service providers, and 3) allow and encourage local communities to develop and design their own wellness programs.

Awards to each of the grantees was based on a formula that consisted of 1) a fixed minimum amount, 2) the proportion of the county population at or below poverty level, and 3) a relative needs index based on how counties fared in regards to 12 health indicators. Three-year grant awards ranged $109,345 to $489,968.

**Project Development Procedure**

A non-competitive request for proposal (RFP) process began in November of 2000. The RFP required at least one partnership between a public agency, such as public health, and a community-based organization that served the indigent population. Potential grant recipients were given the opportunity to determine the target population within their community and design their specific program, although it was required to fall under one of the following general categories:

1. Outpatient case management for the chronically ill across the continuum of care;
2. Assessment of outcomes/value/impact of current or newly established pilot projects/strategies;
3. Augmentation of specialty and primary care services in remote geographic areas;
4. New or nontraditional collaborative planning efforts that address specific community health care needs;
5. Chronic and long-term disease management and injury prevention;

6. Establishment and/or augmentation of provider networks and service delivery competencies; and
7. Enhancement of local infrastructure, technology, and /or medical equipment to support chronic disease, early intervention, and/or wellness and prevention programs.

Grantees were not required to serve CMSP beneficiaries exclusively, although some portion of the target population had to include the CMSP population.

To support potential recipients in developing their grant applications, information regarding CMSP beneficiaries was provided to each county. Data analysis using two calendar years (1999 and 2000) of CMSP eligibility and paid claims files was generated using SAS® statistical software. County-specific information was given to each agency or organization applying for a grant. Data included; 1) demographics, 2) frequent inpatient and outpatient diagnoses as identified by ICD-9-CM (Practice Management Information Corporation, 1999) code, 3) most costly and most frequent inpatient and outpatient diagnoses as identified by ICD-9-CM code, 4) place of service (i.e., clinic, hospital, pharmacy), 5) frequently prescribed pharmaceuticals, and 6) frequent mental health and alcohol and other drug diagnoses identified by ICD-9-CM. In addition, potential grantees were required to complete logic models and submit them with their grant applications.

CMSP contracted with two organizations to provide evaluation and programmatic support to each of the grantees prior to the RFP and throughout the grant cycle. Dennis Rose and Associates (DRA) provide evaluation support and assistance to each grantee. The Center for Civic Partnerships (CCP) provides technical support surrounding program and organizational development.

**Evaluation Design**

The CMSP W&PP evaluation effort has three primary goals. First, to build the capacities of local communities in the collection, management, and use of data; second, to build evaluation efforts that speak to local informational interests and actively engage local stakeholders in information development and use; and finally, to provide CMSP W&PP and CMSP Governing Board with information regarding the value of wellness and prevention activities. To this end, the evaluation was designed to address questions related to the primary objectives of the W&PP initiative below.

1. To what extent did access to health services improve/increase –particularly primary care services, among the medically underserved/indigent in CMSP counties?

2. To what extent did collaboration among local providers change in order to improve quality and access to services?

3. To what extent did engagement in prevention and wellness activities around the current health needs of CMSP beneficiaries reduce the incidence of catastrophic care and its associated costs?

An analysis of outcome data will be required to fully address the above questions, and begin to explore the impact of these efforts on the overall health and well-being of the recipients/ participants and the systems of care designed to serve them. Each of the sites is currently developing data that will be able to speak to changes in health coverage among the target population, client health and well-being, utilization of services, and client and stakeholder satisfaction. Because grantees are only midway through the grant period, evaluation data regarding these objectives is not yet available.

**Results**

Of the 33 grant projects funded by the CMSP W&PP, four projects focused specifically on Latino populations—those in Imperial, San Benito, Sonoma, and Tehama counties. Table 1 lists the name of the grantee, the community served, and the objectives of the W&PP project.

**Project Descriptions**

**Imperial W&PP Project**

Imperial is a rural, primarily agrarian county in the southeastern corner of California bordering

Mexico and Arizona that covers approximately 4,200 square miles. There is no metropolitan area, and the agriculturally-based economy is dependent on varied crops including broccoli, onions, asparagus, alfalfa, sugar beets, and cantaloupes. Approximately 72% of persons living in Imperial County are of Hispanic or Latino origin (U.S. Census Bureau, 2000b). In 1999, the median household income was 33% below California's average household income, and nearly 23% of the population was considered below the federal poverty level (U.S. Census Bureau, 2000c). Imperial County has two hospitals and several satellite college campuses and a junior college system. There is a county transit system; however, most people rely on personal transportation. Many buses offer transportation from Calexico, California into neighboring Mexicali, Mexico but, the border is easily passable by foot through the Immigration and Naturalization Services checkpoint. Field laborers line up at three o'clock in the morning in Mexicali to cross the border into California.

Table 1
Description of CMSP Wellness and Prevention Program Grantees Working with Latino Communities

| Grantee | Program Objective | Community / Population Served |
|---|---|---|
| The Imperial Valley Cooperative | Asthma education program designed to optimize the management of asthma | Low-income Spanish- and English-speaking adults |
| San Benito County Health and Human Service Agency | Development of a comprehensive diabetes health education program including prevention and management of care for diagnosed diabetic clients. | Seasonal migrant farmworkers |
| Sonoma County Department of Health Services "Next Steps" Program | Early detection and treatment of chronic disease with the objective of keeping the indigent population healthy and avoiding acute episodes of care. | Low-income clients at risk for cardiovascular disease, primarily Latinos |
| Tehama County Health Services Agency | Development of a stable, ongoing set of diabetes education classes and support groups. | Monolingual Latinos with diabetes |

Dust, agricultural pesticides, smog from neighboring San Diego, and pollution from the *maquiladoras* (factories) directly across from the border affect air quality and exacerbate the problems associated with asthma in Imperial County. The temperature in the county can reach as high as 120° in the summertime. According to the California Health Interview Survey (CHIS), nearly 9% of the adults in Imperial reported being diagnosed with asthma by a physician (UCLA Center for Health Policy Research, 2002).

Imperial Valley's Asthma Initiative was formed with a core membership representing key stakeholders in the provider community,

including the Imperial County Child Asthma Project, California Asthma Among the School-Aged Project, CMSP W&PP Adult Asthma Project, and local providers/provider groups. The Asthma Initiative strategically pursed grants in order to blend funds to address asthma throughout the community. The CMSP W&PP Adult Asthma grant is only one component of the total initiative.

The Imperial County W&PP project targets low-income Spanish- and English-speaking resident adults of Imperial county who have had acute episodes of asthma that resulted in an emergency room visit or hospital visit or who have non-diagnosed/managed asthma. The program is based on the theories that: 1) health is influenced by a reciprocal relationship between individuals and their environment; 2) change is a multi-stage process requiring different strategies and interventions within broad-based collaborations that build upon local systems and standards of care; and 3) successful disease management requires an informed consumer in an educated partnership with a physician. In order to put theory into practice, the Imperial Valley Cooperative implemented three strategies:

1. Increase knowledge and awareness at a community level through a social marketing campaign, expanded promotora capacity, community forums, and information distribution.

2. Develop, disseminate, and adopt a community standard of care for adult asthma based on American Academy of Allergy, Asthma, & Immunology recommendations.

3. Foster and provide client-centered education based on the National Asthma Education and Prevention Program, accompanied by readily available, comprehensive, culturally and linguistically appropriate education materials that are clear and understandable to the client.

The first task was to conduct an assessment to determine the extent to which local providers were following the National Asthma Education and Prevention Program (NAEPP) Guidelines with their clients (National Asthma Education and Prevention Program, 1997). While most providers who treat asthma were aware of the full set of Guidelines, relatively few routinely used them as a whole. In response to this finding, the Initiative developed a provider education campaign with the goal of encouraging adoption of the NAEPP Guidelines among all providers who see asthma patients. An adult asthma standard of care was developed and disseminated to all local asthma providers.

The second step in this multi-tiered effort was the creation of an outreach and education program designed to increase awareness of asthma among the general population with the goal of prompting those with asthma or those at risk for asthma to see a physician for screening and engage in a range of asthma management strategies.

Focus groups with health care providers revealed that traditional Western medical approaches to health services and health education were ineffectual with this population. Based on successes experienced in other programs, a local physician championed the use of *Promotoras de Salud*, who are recruited from the community and trained to deliver asthma education and self-management strategies to adult asthmatics. Five promotoras received extensive asthma education provided by a local physician, who developed a comprehensive asthma-based curriculum in both English and Spanish. The rigorous training undergone by the promotoras has facilitated physician's acceptance of the promotoras as valuable assets in the treatment of asthma. The project has rallied the support of the local medical community and is in the process of institutionalizing many components of the project into established education protocols at several of the participating health services locations.

Additionally, the project developed asthma toolkits that include age-appropriate medication delivery devices as well as educational materials and action plans in English and Spanish. These toolkits are distributed to local providers' offices

and hospital emergency rooms throughout the county. The Imperial project staff works with provider staff to distribute the toolkits and conduct provider staff education regarding how to introduce patients to the toolkit, in a "train the trainer" format. The promotoras then follow up with the recipients of the toolkits to address questions and provide further information about asthma care.

Recently the Imperial Valley's Asthma Initiative expanded capacity by providing additional extensive training to ten promotoras, and the promotoras have begun to provide the client-centered education sessions to adult asthmatics.

**San Benito W&PP Project**

San Benito County lies approximately 45 miles south of San Jose and Silicon Valley and 40 miles inland from Monterey, encompassing 1,396 square miles. Much of the northern part of the county is a flat plain--the southernmost reaches of the Santa Clara Valley. The County has lush farmlands, fruit and nut orchards, wineries, and cattle ranches. Almost 3/5 of the county's land area is in farms--most of it used for grazing. Agriculture is the county's major producing industry, with a 1999 gross value of $179,848,000 (San Benito Chamber of Commerce, 2003). As of July 1, 2002, the county's population was approximately 56,000. Nearly 48% of the population consider themselves Hispanic or of Latino origin (U.S. Census Bureau, 2000c).

The San Benito County Health and Human Service Agency (SBCHHSA) identified the need for diabetes care and education through surveys. Data collected from two separate community assessments was used to describe the health status of the community and identify barriers to accessing health care (San Benito County Health and Human Services Agency, 2000a,b). Two community needs assessments, administered a year apart, surveyed more than 700 individuals at shopping areas, clinics, parent-teacher meetings, churches, migrant camps, and other community settings. Eighty-eight percent of the individuals surveyed identified themselves as Hispanic or Latino. In terms of access, the survey determined that Latinos in San Benito were more likely to have minimal or no medical coverage. Factors that contributed to the lack of insurance were short-term, seasonal employment, limited English proficiency, and lower levels of education. The survey indicated that Latino men were more likely not to have medical insurance and were less likely to seek medical care. In terms of individual risk factors the surveys found that 59% of the respondents had been told that they have high blood pressure or elevated blood sugar, and most of the respondents (55%) said that they fry or boil their food (San Benito County Health and Human Services Agency, Note 2).

The results of the survey led the SBCHHSA, Public Health Services to develop a partnership to address diabetes in conjunction with the San Benito Health Foundation (a rural health clinic) and the University of California Cooperative Extension. This Partnership implemented a program targeting adult agricultural workers between the ages of 21 to 64, and their families who have little or no health insurance and are unable to obtain it due to financial, geographic, cultural, and/or language barriers. The program seeks to:

- Raise awareness of the risks of diabetes;
- Increase the capacity of individuals to prevent diabetes through improved nutrition;
- Improve access to health care services via enrollment into medical insurance programs.

The project staff believe that if individuals are enrolled in a health coverage program; are able to identify their own risk related to a range of health issues; are aware of the resources and services that they have access to; and are supported in their efforts to access care, then they will be more likely to engage in preventive health behavior. Thus, project goals are being approached from several directions in order to insure local change at multiple levels, including individual behavior, community/social norms regarding health behavior, local business policy and practice, and finally institutional support.

In advance of the educational outreach and enrollment components of the program, staff conducted an assessment of local health care

providers in order to determine the number of local providers who would accept new CMSP client referrals (Note that approved MediCal providers are also eligible CMSP providers.) Of the 48 doctors serving the San Benito community, only 6 indicated that they accepted CMSP clients. Four indicated that they would accept referrals from another physician already seeing a client, and one did not respond. A large majority of providers (77% of local doctors and 62% of local dentists) indicated that they did not accept clients enrolled in CMSP. Recognizing that the lack of available physicians/providers could pose a significant a barrier to the overall approach of the project, staff queried the doctors and dentists that did not accept patients with CMSP insurance. Nearly half of the doctors and a quarter of the dentists were not able to give specific reasons as to why they did not take CMSP-insured clients. In response, the project implemented a provider education component to focus on addressing questions and concerns that providers had about CMSP (reimbursement, paperwork requirements, eligibility, etc.). Between December 2001 and December 2002, through promotion and outreach, the program was able to add three additional practices that accept CMSP beneficiaries. W&PP staff in San Benito emphasized the importance of maintaining contact with all the CMSP providers to ensure the lines of referral remain open.

The second component of this effort focused on providing education and information regarding diabetes and other health issues to individuals within the agricultural worker community of San Benito County. Two bilingual/bicultural health workers provided group presentations as well as one-on-one sessions in farm worker camps, at worksites, and at a variety of social service outlets. The health workers also visited nurseries, orchards, fruit packing plants, canneries, community food banks, and low-income apartments. Carlos Lopez, a Peruvian physician and outreach worker, stated:

> "…the first step is to go out to the communities where the seasonal workers reside, with [bilingual] staff who are familiar with Latino culture 'outside' the United States, and who understand the culture shock affecting migrant workers who are trying to adapt to a new and different place….being able to enter the camps or "houses" where workers reside, having good interpersonal skills, and respecting the beliefs and customs of the workers is necessary to break linguistic and cultural barriers within these communities (Lopez, 2003)."

In addition to the clients, family members and relatives also received education services and health information in both Spanish and English. W&PP staff in San Benito indicated that because workers frequently move to and leave the camps, education must be consistently and repetitively delivered, and educational material must be simple for the community to understand it. Finally, if W&PP staff identified potential diabetics during their educational activities, they made referrals to the San Benito Health Foundation Clinic, which provides transportation services to clients when necessary. Conversely, individuals identified by the local clinic as diabetic, receive education classes conducted by the W&PP project staff regarding diabetes and associated risk factors such as hypertension, high cholesterol, and obesity. The San Benito W&PP project is in the process of expanding the program by adding cooking classes and diabetes support groups offered in both Spanish and English.

The bilingual health educators also offered information on available health coverage. Specifically, participants are made aware of the range of health coverage programs available (CMSP, MediCal, Healthy Families, etc.) and assisted with initial eligibility screening and application packages. All potentially eligible participants were referred to the Social Services Department for formal enrollment into the appropriate program. Translation and advocate services were provided to those who needed assistance contacting social services or applying for benefits. Participants reported a diminished fear of contacting social services to apply for CMSP and other support programs.

Preliminary data from the SBCHHSA indicates that applications for CMSP nearly tripled after educators began their health coverage outreach. A review of total annual applications 12 months prior to health coverage outreach, and 12 months after outreach shows applications for CMSP increased from 312 to 831.

Finally, health educators have tried to improve the nutrition of seasonal workers by visiting with catering staff that run the local food trucks. Food or "catering" trucks bring food and drinks to workers in the fields or orchards. W&PP staff encouraged catering staff to provide healthy alternatives, such as fruit, juices, water, and prepared salads as alternatives to sodas and pre-packaged high-fat foods.

**Sonoma W&PP Project**

Located about 50 miles north of San Francisco, Sonoma County is a combination of frontier rural, agricultural, suburban, and urban communities encompassed within 1500 square miles. There are nine incorporated cities within the county. Three of these communities, Petaluma, Santa Rosa, and Healdsburg, are located along the spine of Sonoma County and follow Highway 101. The Russian River area is located to the west of Highway 101 but is located on a busy connector to the highway. Santa Rosa and Petaluma each have a total population over 50,000 and are therefore classified as urban. The U.S. 2000 Census data indicate there are approximately 464,000 people living in Sonoma of which 17.3% identify themselves as Hispanic or of Latino origin. The cost of living in Sonoma County jumped 5.4% last year in its biggest increase since 1984 (Santa Rosa Press Democrat, 2002). The Office of Statewide Health Planning and Development 2000 Annual Report of Clinics indicates that 39% of individuals in Sonoma County are uninsured, and 55% of individuals in the service area report their income to be less than 200% of the Federal Poverty Guidelines. Sonoma's median household income is $53,076 (U.S. Census Bureau, 2000d), and the median price for a home is approximately $350,000 (Santa Rosa Press Democrat, 2002), emphasizing the gap between the county's affluent and low-income populations. A growing viticulture industry (vineyards and wineries) is leading to a growing number of migrant farm workers, many of whom are monolingual, and most of whom are uninsured.

Sonoma County's W&PP project, the "Next Steps" program, focused on the early detection and treatment of chronic disease with the objective of preserving the health of the indigent population and avoiding acute episodes of care. The Next Steps project was designed and implemented on both an individual and community level. Next Steps targeted CMSP beneficiaries and other low-income clinic clients who are at risk for cardiovascular disease with interventions designed to reduce risk and establish positive health behaviors; in addition, the project promoted healthy communities. Though the project serves individuals of all ethnic and racial backgrounds, the participating clinics' patient base is primarily Latino. As in Imperial County, CMSP W&PP funding made up a smaller portion of funding for the overall multi-clinic initiative.

Next Steps was a collaboration between the Sonoma County Department of Health Services and eight participating Community Health Centers. The Redwood Community Health Coalition, which represents the eight Next Steps sites as well as 10 additional members health centers, served as a hub for training, program administration and continuity throughout the project. The participating clinics included Alliance Medical Center in Healdsburg, Copper Towers in Cloverdale, Family Practice Center in Santa Rosa, Occidental Area Health Center in Occidental, Russian River Health Center in Guerneville, Petaluma Health Center in Petaluma, Sonoma Valley Community Health Center in Sonoma, and Southwest Community Health Center in Santa Rosa. Each of the eight participating health centers established a primary project team, composed of a public health nurse (PHN) and a bilingual community health outreach worker (CHOW), in addition to medical providers and clinic nurses.

A cornerstone of the Next Steps program was its emphasis on skills-building and chronic disease training for the CHOWs. Each of the eight

CHOWs received more than 30 hours of training for the project. Training included chronic disease prevention, client coaching skills, data collection training, smoking cessation counseling, behavior change theory, and diabetes education classes with diabetics and their families. Wherever possible, any community classes (such as identifying asthma triggers, enhancing walking skills) that would benefit the CHOW or the clients are offered as well.

To accommodate for variations in clinic practices, each clinic developed "inreach" (drawing participants from within clinic practices) plans to identify and recruit eligible participants to the program. Strategies included attendance at health center provider meetings by CHOWS and PHNs to stimulate referrals to the program, researching medical records to identify potential clients by diagnostic code, posting flyers in the health centers, and expanding outreach into the community. In most cases, the clinic medical providers made initial contact and referral into the program, with follow-up contacts conducted by the CHOWs working in tandem with the PHNs. Each participant underwent a health risk assessment and developed a personal health improvement plan jointly with the PHN and CHOW. Each health improvement plan was unique to each client and was based on the participant's health status, history, and lifestyle; risk factors; readiness to make behavioral changes; and the team's capacity to monitor and support the participant. Great emphasis was placed on relationship-building between the CHOWs and clients. Relationships were fostered during clinic visits, home visits, educational sessions, and regular telephone calls with the intent of providing the support needed to motivate individuals and establish lasting behavioral change.

The Next Steps program also recognized that a healthy community can create a positive context from which to support and sustain clients in the process of improving their health behaviors. To this end, teams of PHNs, CHOWs, clinicians, and clinic nurses planned and conducted community-level health promotion activities. To begin, each Next Steps conducted a community health assessment and mapped community assets to identify opportunities to collaborate with other community-based organizations promote healthy behaviors. For community members, these efforts resulted in outreach events for Bi-National Health Week, health fairs, and a variety of activities to promote physical activity within the communities served by the project. Separate monthly meetings for CHOWs and PHNs allowed each clinic team to be with their peers to identify common challenges and devise solutions. Quarterly joint meetings were held to share project-wide experiences and explore opportunities to discuss system-level program initiatives.

The Sonoma County Next Steps project made a commitment to develop cultural competency by providing staff opportunities for two-week clinical and cultural immersion experiences in rural Mexico. The purpose of the immersion program was to sensitize clinical staff to the experience of being in an environment in which one cannot read or speak the language. An additional goal was acquiring a sense of rural Mexican social and medical cultures.

In 2001, a Next Steps team of CHOWs participated in a two-week program in Ensenada, Mexico. In May 2002, a team of PHNs and CHOWs from the program traveled to Chacala, Mexico, a fishing village north of Puerto Vallarta. On both trips, team members participated in outreach health clinics and health fairs in small outlying villages and in Spanish language classes. Critical lessons reported by participants of the cultural immersion experience included:

1. Certification and expertise do not have much value in creating trust between provider and client when language is a barrier.

2. Team members learned from personal experience about the climate, geography, and social hardships that many rural Mexicans experience and how these influence their attitudes towards their health care.

3. Team members became more aware of the feeling of loss of homeland that is experienced by immigrants.

**Tehama W&PP Project**

Tehama County is a large, rural county located at the northern end of the Sacramento Valley. The county population of 57,101 resides in three small towns and in unincorporated communities spread over 2,951 square miles. Based on 2000 Census data (U.S. Census Bureau, 2000e), the majority of the population is white (non-Hispanic), with a growing Hispanic community that represents nearly 15.8% of the people in the county.

Agricultural production is the mainstay of Tehama County's economy. The walnut industry represents the largest single crop, valued at $21.7 million in 2001 according to the California Farm Bureau. Cattle ($20.6 million) and milk production ($15.5 million) also add significantly to the community's economy. Tehama's long-lived cattle industry is celebrated with the "Red Bluff Round-Up", the nation's largest two-day rodeo, which is in its 85th year.

Tehama County began a successful case management program as a result of funding from initial W&PP efforts (1999 and 2000). At the conclusion of that effort, Tehama County's leadership analyzed the types of referrals into the case management program to determine ways to best serve the community. Information revealed that 93% of referrals into case management were for diabetic clients and 40% of the total referrals were for monolingual Latino clients. The results pointed to the need to provide intensive diabetes services to the monolingual Latino community in Tehama County.

Because of the abundance of orchards and the relative dearth of row crops, the farm worker population in Tehama County is more permanent than that of Imperial or San Benito counties. Consequently, Tehama County developed a stable, ongoing set of diabetes education classes and support groups, conducted in Spanish, to address the needs of monolingual Latinos.

Monthly Spanish-speaking diabetic support groups began in June 2001 and were held in Red Bluff, CA during the evenings to accommodate workers and their families. As of May 2002, 33 people had enrolled in the monthly sessions, 12 participants attended at least 50% of the meetings, and 8 participants attended 80% of the meetings. Family members were encouraged to attend the support group meetings. The majority of clients joined the support group through referral by friends or support group participants. Meetings provided a venue for individuals with diabetes to gain information about their condition and share resources. In an environment where their native language was encouraged and their culture celebrated, participants were able to problem solve challenging situations and share emotions associated with the rigors of proper diabetic self-management care. A health screen that included monitoring the client's weight, blood pressure, heart rate, oxygen saturation, and blood glucose levels was performed prior to the meal/snack that was served during the support group. Food was provided and prepared by the support group staff as a client incentive as well as a teaching tool. Education efforts were focused on better blood sugar control via portion size control and following the food pyramid, rather than changing cultural food preferences. On the annual anniversary and at Christmas, the support group had a potluck in which traditional foods were integrated with non-traditional healthy options.

A PHN and a bilingual/bicultural Health Education Assistant administer and facilitate the W&PP project, which was deemed to be critical for facilitating the support group's efforts. The project staff worked to enable and empower clients to manage their diabetes by providing one-on-one education, conducting home visits, and providing diabetic supplies such as glucometers and testing strips. In addition, the project staff ensured clients' access to medical appointments and support group meeting by routinely arranging for transportation through the provision of bus tickets or directly transporting clients when needed. Assistance was provided to clients to help them navigate the health care system.

In addition to hosting and facilitating the Spanish-speaking diabetes support groups, Tehama County provided the community with accurate information about the diabetes and the disease process, treatment regimens, and proper self-management care through two-day long educational sessions. The sessions, which were offered twice a year, were taught by a bilingual certified diabetes nurse educator, and were based on an extensively developed American Diabetes Association curriculum.

The bicultural health education assistant also attended monthly meetings of the community-based nonprofit organization, Latino Outreach. The monthly meetings, coordinated by the nonprofit, bring together the different agencies and business that serve the Latino community in Tehama County. The meetings were used to share news and events among agencies and brainstorm ideas for future programs among the multiple groups.

The Tehama W&PP staff members also conducted outreach and screening efforts via the county-operated mobile health unit and at local community events such as the Cinco de Mayo celebration and Feria de Salud. The mobile clinic traveled to remote locations throughout the county and offered health assessments and referrals. The project also promoted its efforts though flyers distributed at 47 locations throughout the county with strong emphasis on all local health providers, Latino markets, churches, and laundromats.

St. Elizabeth's Community Hospital and the Tehama County Medical Outpatient Clinic were two of the most active collaborators. The registered dietician at St. Elizabeth's worked closely with W&PP staff and provided referrals to diabetes education, assisted with inreach inside the hospital, and furnished educational materials and information regarding upcoming educational seminars. The Medical Outpatient Clinic was the major health care provider for most of the clients. The clinic was instrumental in helping project staff enroll clients in the Patient Assistance Program, a program that helps clients in obtaining necessary medications that they could not otherwise afford.

A story shared by Tehama's project director illustrates the effectiveness of the diabetes support group classes: A CMSP client heard, through word of mouth, how good Tehama County's Spanish-speaking diabetes support group was. Though he spoke little Spanish, he came to a class and said that he learned more in one hour about his diabetes there than from months of previous diabetes education. With the assistance of the project staff, he was provided with a glucometer, was getting his blood sugar in check, and planned to attend the support group meetings even though English is his primary language.

**Challenges to Project Implementation**

Each of the projects has reported challenges encountered with hiring and retaining bilingual and bicultural staff; these are partially attributable to low-end pay scales, distant geography and poor public transportation services. Turnover necessitates periodic training and mentoring. One W&PP grantee met the challenge of turnover by designing an orientation for newcomers that included "shadowing" experienced workers and using a well-developed project binder to prepare new health educators and PHNs for the project's activities. One site noted the rippling affect of circumstances related to 9/11/01 on staffing their wellness and prevention project as communities are now challenged with developing bioterrorism response plans. Public health nurses, already in short supply in many rural communities, are being moved from traditional nursing activities to contend with bioterrorism preparedness.

This particular client population presents a range of challenges that require creative solutions. First, the fact that some patients are transient or "migrant" makes regular contact difficult. Even among those that are year-round residents, many do not have telephones or answering machines; give incorrect contact information (such as wrong phone numbers), or simply don't respond to phone calls or mail, making initial contact and/or follow-up very problematic.

Residential or legal status of clients has always presented a challenge when discussing issues of access, utilization and enrollment in what could be perceived as government sponsored programs. With nearly all projects describing a sizeable portion of their clients as undocumented, issues of trust and/or fear of loosing work opportunities or deportation remain barriers to full engagement. This is especially true for projects working to enroll clients in CMSP or other health coverage programs. The hours that services are available, although not a unique problem among those classified as medically underserved, pose significant obstacles to this population who often begin work in the wee hours of the morning and work without stop until well into the evening. Further, transportation to work sites is often provided by the employer, leaving the worker without independent transport throughout the day. Getting the permission of employers to provide on-site services remains a hurdle.

**The Evaluation Effort**

Evaluation objectives and measurement tools were determined separately for each site in tandem with DRA and the four sites. Because of the variability across programs and grantees control over the development of information, there is not standard set of evaluation tools used by all four grantees.

Project sites are using a variety of tailored tools and strategies to collect information including; activity logs, service record forms, sign-in sheets, and registration forms. Projects engaged in any level of direct health service or screening are typically collecting data such as: lab results (height, weight, blood sugar, lipids, peak flow assessments, etc.), function assessments, quality of life assessments, and measures of knowledge and behavior change around management of chronic disease. Finally, several of the sites are collecting information on client, provider, and stakeholder satisfaction.

Information developed through the evaluation is intended to provide the sites with valuable feedback on the value of their program and/or it's specific components. Critical to each of these efforts is data that will inform decisions related to sustainability of key components or of the project as a whole.

**Discussion and Conclusions**

Evaluation of the four projects discussed identified program attributes that contribute to the success of the projects: 1) cultural and linguistic competence, 2) collaboration with the health provider community, 3) and extensive inreach and outreach efforts. Each of the attributes are discussed below.

**Cultural and Linguistic Competence**

It is evident that each of the locally developed wellness and prevention programs had a strong emphasis on the provision of culturally appropriate services for the Latino population. In addition to using bilingual and bicultural health educators, each program also valued and struggled to collaborate with their local network of primary care providers (PCPs). Finally, concerted outreach and inreach activities were necessary to gain the trust of individuals in order to provide health education and link culturally isolated individuals with the infrastructure of social services.

**Bilingual and Bicultural Health Education**

Individual counseling, broad community outreach/awareness activities, home visitation, and the development of user-friendly materials and self-management protocols were considered critical to each project's success. Working with monolingual or limited-English speaking populations, especially those with low-literacy levels, requires bilingual health educators. Providing additional services, other than simple information distribution, requires the ability to understand Latino culture, gain trust, and discuss barriers of change in order to address issues such as lifestyle, diet, and environmental factors. Each W&PP project used bilingual and bicultural health educators to provide services that were tailored to the needs of their specific community and target population. Promotoras in Imperial County, recruited from the community, were familiar with the environmental influences that contribute to

asthma, such as field spraying, and *maquiladoras* (smoke-producing factories located just across the border in Mexico) as well as the border culture and the need to track and contact clients in multiple locations. San Benito diabetes education used bilingual and bicultural staff to deliver health education messages to seasonal migrant workers. These workers have little or no ties to the particular community; thus, training a group of health educators specifically from the community was not as important as providing bilingual education services on a regular basis. A male Peruvian physician and a bicultural female health educator provided an appropriate mix for the services geared to their target population. Sonoma County was addressing multiple chronic disease issues and thus relied on well-trained CHOWs who are bilingual and extensively trained in, chronic disease prevention, client coaching skills, data collection, smoking cessation counseling, and behavior change theory. In addition, Sonoma County provided cross-cultural training opportunities that allowed providers to understand many of the social hardships that rural Mexicans experience and how these influence their attitudes towards their health care. Finally, Tehama County's project was able to address the needs of monolingual Latinos with diabetes through the development of a stable, ongoing set of diabetes support groups. Campaigns in conjunction with Latino Outreach, at Ferias de Salud and Cinco de Mayo celebrations, have given credibility of the program within the community.

## Collaboration with the Health Provider Community

Physicians, physician assistants, and nurse practitioners who work in community clinics often initially identify clients, prescribe medication, and may monitor or case manage individuals with chronic disease. All four projects sought the "buy-in" or support of medical providers within their community as one of their fundamental objectives. The W&PP grantees understood that provider support was crucial to providing the most comprehensive approach to chronic disease management. Through their planning process, two of the grantees determined that there was either a dearth of medical and dental providers (San Benito County), or a belief by providers that Western approaches to medicine were ineffectual (Imperial County). San Benito actively visited physician offices and discussed potential reimbursement mechanisms in an effort to expand the small provider network within their community. Imperial County developed asthma toolkits to distribute to local providers offices and also offered trainings to provider staff regarding use of the toolkit. This opportunity was facilitated by a well-respected local doctor who provided entrée to the provider community, rallied support among his cohorts, and encouraged participation in the promotora program. Although Tehama County's project was not able to solicit many physicians to actively refer clients to their program, one of their successes was identifying PCPs who would accept clients from the diabetes classes and support groups who needed follow-up care. Sonoma County, made provider staff part of the Next Step team. By integrating staff into the team from the beginning and by offering cross-cultural training, they have sought to ensure a commitment to the program and an understanding of the barriers the clients are trying to address.

**Extensive Inreach & Outreach Efforts**

Because of the geographic, economic, linguistic, and cultural barriers that have been discussed previously, outreach and inreach activities are essential for reaching minority populations. Outreach and education teams were able to rapidly gain credibility among the agricultural worker community, in some cases because of their combined backgrounds in medical and social sciences, and others due to their training and their cultural roots in both local and migrant communities. Outreach and inreach strategies use supportive contacts with agricultural workers via a range of venues and encourage ongoing communication between the individual/business/agency/provider and the educator/outreach team - ultimately working towards promoting a collaborative relationship as opposed to simply identifying a resource.

In Tehama County, outreach campaigns through the mobile health clinic, and at community celebrations, have expanded attendance in the diabetes support group. Concerted in reach efforts by Tehama and Sonoma via record review and identification by clinic staff provide an influx of new clients who need education and support services. San Benito and Imperial W&PP actively recruit clients in the places of work such and homes such as migrant camps, agricultural businesses and homes. These activities are essential for improving access.

As the W&PP nears the end of its grant cycle in early 2004, evaluation information will play a vital role in determining any impact of these efforts on the overall health and well-being of individuals and the systems of care designed to serve them. In addition, process measures currently being collected will hopefully identify which program components were implemented successfully and what should be sustained.

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