

10b - Healthy Eating and Physical Activity Program

1. **Program Area:**
COMMUNITY SERVICES
2. **Agencies and Departments involved:**
Health Care Agency (HCA)
3. **New or previously identified in earlier Strategic Financial Plans, if previously identified, what has changed and why:**
New
4. **Description of the project/program - what it is and what it will achieve:**
The Health Care Agency (HCA) proposes to implement a comprehensive, multi-staged healthy eating and physical activity program to reduce the prevalence of overweight and obesity in Orange County. The target populations for this program will consist of community members, schools, worksites, and service providers. An evidence-based approach that focuses on raising community awareness, educating the public and providers, building a treatment infrastructure, and effecting changes in community organizations will be utilized. The program will complement the efforts of existing community coalitions working on policy, advocacy and environmental changes to improve healthy eating and physical activity. Expected outcomes include: 1) increased community awareness of the importance of healthy eating and physical activity, 2) positive changes in knowledge, attitudes and behaviors related to healthy eating and physical activity among community members, 3) increased numbers of healthcare providers following evidence-based/best-available practice guidelines for the management of overweight and obesity and of those at risk for these conditions, 4) the provision of free or low cost treatment services for overweight children through contracted community providers, 5) increased capacity of community organizations to implement changes leading to healthy eating and increased physical activity, and 6) a system to monitor the prevalence of overweight among children and teens and overweight and obesity among adults as well as their levels of healthy eating and physical activity.

Unique Role and Capability of Public Health Services (PHS):

Public health services are population-based and operate at the community level. PHS programs monitor the health status of the population; diagnose and investigate identified health problems and hazards in the community; inform, educate and empower people about health issues; mobilize community partnerships to identify and solve health problems; develop policies and plans that support individual and community health efforts, enforce laws and regulations that protect health and

ensure safety; link people to needed personal health services; assure a competent public health and personal healthcare workforce; assess effectiveness, accessibility and quality of health services; and research for new insights and innovative solutions to health problems (California Conference of Local Health Officers, 2005).

Organizationally, PHS consists of the following divisions: Family Health, Public Health Nursing, California Children's Services, Public Health Laboratory, Disease Control & Epidemiology and Health Promotion. Within these divisions, there is sufficient expertise to implement a program of this magnitude. For example, Family Health's Nutrition Services Program has expertise in the area of promoting healthy eating and physical activity to low-income populations through its Women, Infants and Children (WIC) nutrition program which serves 42,275 clients annually. In addition to the WIC Program, Nutrition Services has funding from the California Nutrition Network to enhance local coordination of Network-funded projects in Orange County, maintain and strengthen a local Nutrition and Physical Activity Collaborative, and administer the regional 5 a Day campaigns. This is complemented by the Health Promotion Division's extensive expertise in implementing population-level programs. Health Promotion staff already work to increase the capacity of individuals, organizations and communities to promote healthy behaviors. An example of this is its Tobacco Use Prevention Program, which has successfully worked at the individual, community and policy levels to reduce the use of tobacco products countywide. PHS intends to extensively utilize its existing expertise and knowledge base in implementing the proposed project.

Prevalence of overweight and obesity:

In Orange County, the percentage of overweight children ages two to five has increased from 16.3% in 2001 to 17% in 2002. Similarly, the percentage of overweight children ages five to twenty has increased from 19.7% in 2001 to 21.1% in 2002 (Children and Families Commission of Orange County, 2004). This is significant since overweight and obesity acquired during childhood and adolescence may persist into adulthood and increase the risk for chronic diseases, including diabetes type 2, cardiovascular disease and hypertension (The Surgeon General's Overweight in Children and Adolescents, 2000, cited in Children and Families Commission of Orange County, 2004). Approximately half (50.2 %) of Orange County adults were overweight or obese in 2003 (California Health Interview Survey, 2003).

The importance of healthy eating and physical activity:

Poor diet and physical inactivity were the second leading actual cause of death in the United States in the year 2000, approaching smoking as the number one actual cause (Mokdad, Marks, Stroup & Gerberding, 2004). Eating too many calories and not getting enough physical activity result in an energy imbalance, and are

contributing factors for overweight and obesity (USDHHS, 2001). Overweight and obesity increase the risk for hypertension, dyslipidemia (high levels of cholesterol or triglycerides), type 2 diabetes, coronary heart disease, stroke, gallbladder disease, osteoarthritis, sleep apnea and respiratory problems and some cancers (USDHHS, 2005). Since 41% of Orange County deaths in 2001 were from cardiovascular and hypertensive diseases and diabetes (California Department of Health Services, 2004), addressing poor diet and physical inactivity is of vital importance in reducing morbidity and mortality.

Recommendations to improve healthy eating and physical activity:

To help reduce the prevalence of obesity and overweight, the Centers for Disease Control and Prevention (CDC) recommends that teens engage in vigorous physical activity 3 or more days per week for 60 or more minutes per occasion. Similarly, adults (ages 18 and older) should engage in moderate/vigorous physical activity for at least 30 minutes per day on most days of the week (United States Department of Health and Human Services, 2005). However, approximately 4 in 10 (39%) of Orange County teens (ages 12-17) do not engage in vigorous physical activity 3 or more days per week for 60 or more minutes per occasion; and approximately one fourth (25.3%) of Orange County adults (ages 18+) do not engage in moderate/vigorous physical activity at all (California Health Interview Survey, 2001). Additionally, in 2003-2004, only 30.4% of fifth graders, 36.5% of seventh graders and 34.5% of ninth graders met the minimum fitness standards in all six areas of the Physical Fitness Test in Orange County (California Department of Education, 2005). The CDC further recommends that both teens and adults eat 5 or more servings of fruits/vegetables daily. However, 58.8% of children (ages 2-11) (California Health Interview Survey, 2003), 59% of teens (ages 12-17), and 47.9% of adults ate less than 5 servings of fruits/vegetables daily in Orange County (California Health Interview Survey, 2001).

Services to be Provided:

Phase I – Building the Capacity of HCA Programs (Years 1-4):

The proposed intervention is based on the Social-Ecological Model (McElroy, Bineau, Steckler & Glanz, 1988) and the Spectrum of Prevention (Cohen & Swift, 1999). The Social-Ecological Model is a theoretical framework for understanding the multiple factors that influence behavior. The model posits that interventions that are designed to impact more than one sphere of influence are more effective (California Department of Health Services, 2001). The Spectrum of Prevention provided a foundation for developing this multifaceted program. The Spectrum identifies six levels of intervention that encourage practitioners to move beyond a primarily educational or individual skill-building approach to a more community-wide, systems change focus. These six domains include: 1) strengthening individual knowledge and skills, 2) promoting community education, 3) educating providers,

4) fostering coalitions and networks, 5) changing organizational practices, and 6) influencing policy and legislation.

In 2005, a survey of 18 HCA programs was conducted to assess the extent to which healthy eating and physical activity were promoted by each program surveyed. The survey enumerated the types and number of activities conducted by each program and the percentage of time within each activity devoted to promoting healthy eating and/or physical activity in the last 12 months. Survey questions listed activities in each of the six domains of the Spectrum, including those related to policy and organizational change. Examples of these activities included home education to household members (strengthening individual knowledge and skills), use of mass media (promoting community education), education of non-traditional healthcare providers (educating providers), collaborating with community organizations in joint projects (fostering coalitions and networks), implementing or assisting in the implementation of employee health promotion programs (changing organizational practices), and providing opportunities for community members to act as advocates (influencing policy and legislation). Survey results revealed that PHS programs currently conduct activities in all six Spectrum domains. However, from 184,981 activities conducted in the last 12 months, only 67.5% included promoting healthy eating. This means that approximately 60,000 opportunities to promote this behavior were missed during this period. Even greater opportunity exists for including the promotion of physical activity within these programs since only 7,369 (4%) of program activities included the promotion of this behavior. By Year 4, selected HCA programs will increase by at least 10% from baseline the number of program activities that include promoting healthy eating, and by at least 20% from baseline the number of program activities that include promoting physical activity.

Phase II – Community Interventions (Years 2-10):

In Year 2, and in collaboration with the Nutrition and Physical Activity Collaborative, the program will conduct an assessment of community-based organizations, healthcare and other selected service providers, and community members to establish baselines for: 1) raising community awareness about the issue, 2) the capacity of healthcare providers and community organizations for promoting healthy eating and physical activity, and to 3) determine the best alternatives for providing free or low cost treatment services for overweight children. The program will also assess and support existing efforts for improving the built environment for physical activity and for improving the availability of healthy foods countywide.

Based on the results of this assessment, in Years 3-10, program staff and contracted providers will develop, implement and evaluate a number of evidence-based interventions that may include but would not be limited to: informational outreach activities; point of decision prompts; provider-based counseling; community-wide and targeted awareness campaigns; social support interventions in community

settings; worksite programs for promoting healthy eating, physical activity and breastfeeding; advocacy training for community leaders and parents working on environmental changes; partnerships with local restaurants and stores to improve healthy food choices; the development and promotion of a clearinghouse of population-specific resource materials; and peer education (promotora) programs. In addition, a network of free or low cost treatment service providers for overweight children will be established in collaboration with community providers.

Evaluation:

All Scope-of-Work interventions will include process evaluation (e.g. counts of activities performed), and most will also include impact evaluation measures (e.g. pre and post measures). In addition, increases in organizational capacity will be evaluated using the stages of change model as a measurement tool. Treatment services for overweight children will be evaluated by the prospective follow-up of patient BMI measurements and self-reported healthy eating and physical activity improvements. Patients will be followed beyond program completion to assess sustained improvement over time as compared to standard counseling without a treatment referral. The program epidemiologist will be responsible for overall data management and reporting. In addition to managing the program data, the epidemiologist will monitor and provide reports to staff on Orange County indicators for children, teen and adult Body Mass Index, healthy eating, and physical activity reports from the Orange County Health Needs Assessment, California Health Interview Survey and relevant program-specific data (e.g. CHDP, Healthy Families, etc.).

5. Personnel - will the program/project require additional staffing? If so, estimate number of positions:

7

6. Cost - estimate and identify costs:

Please refer to the attached spreadsheet for cost information.

7. Potential Funding Sources:

Net County Cost

Please refer to the attached spreadsheet for funding information.

8. Community Awareness (stakeholders):

HCA staff currently participate in various community coalitions working to address overweight and obesity in the County. As mentioned earlier, if funded, the proposed HCA Healthy Eating and Physical Activity Program will complement the efforts of these groups. It is expected that these collaboratives will strongly support the proposed HCA program as it includes services previously identified as service gaps

in their strategic plans. The existing high level of collaboration will provide a strong foundation for ensuring the program's success.

9. Mandated or discretionary:

Discretionary

10. Implementation period if funding were available:

During FY 2006-07

