

**V(A). Planned Program (Summary)**

**Program # 6**

**1. Name of the Planned Program**

Childhood Obesity

Reporting on this Program

**V(B). Program Knowledge Area(s)**

1. Program Knowledge Areas and Percentage

KA Code	Knowledge Area	%1862 Extension	%1890 Extension	%1862 Research	%1890 Research
703	Nutrition Education and Behavior	50%		50%	
724	Healthy Lifestyle	50%		50%	
	<b>Total</b>	100%		100%	

**V(C). Planned Program (Inputs)**

1. Actual amount of FTE/SYs expended this Program

Year: 2013	Extension		Research	
	1862	1890	1862	1890
Plan	2.0	0.0	0.0	0.0
Actual Paid Professional	1.5	0.0	1.0	0.0
Actual Volunteer	0.0	0.0	0.0	0.0

2. Actual dollars expended in this Program (includes Carryover Funds from previous years)

Extension		Research	
Smith-Lever 3b & 3c	1890 Extension	Hatch	Evans-Allen
68735	0	0	0
1862 Matching	1890 Matching	1862 Matching	1890 Matching
0	0	0	0
1862 All Other	1890 All Other	1862 All Other	1890 All Other
23874	0	71619	0

**V(D). Planned Program (Activity)**

1. Brief description of the Activity

-Conducted baseline measurements on 976 children ages 2-8 years old as part of multi-state

integrated research and extension project; partnered with several local agencies/offices/groups and universities to accomplish this

- Trained and standardized college nursing students to conduct anthropometric measurements
- Conducted focus-groups in intervention and delayed-optimized/comparison villages to plan for intervention focused on improving the health of children by decreasing overweight and obesity among 2-8 year olds
- Identified and trained role models from intervention villages to lead changes conducive to healthy living at the village level; assisted with the formulation of the role model training guide
- Collaborated with Pacific Island Land-Grant college and university nutrition educators to develop training modules for nutrition educators and community workers who currently work with or plan to work with Pacific Island groups
- Assisted with the contextualization of Community Assessment Tool forms and conducted assessments using Community Assessment Tool forms in intervention villages and delayed-optimized (comparison) villages.

**2. Brief description of the target audience**

The target audiences included children, ages 2-8 year old, caregivers of children, and families with young children.

Key people from villages who have influence and have the potential to influence others were selected based on community recommendations and the recommendations of the Children's Healthy Living Program Local Advisory Committee to be trained as "role models" for health.

**3. How was eXtension used?**

eXtension was used to search for literature on best practices in promoting community health and wellness.

**V(E). Planned Program (Outputs)**

**1. Standard output measures**

2013	Direct Contacts Adults	Indirect Contacts Adults	Direct Contacts Youth	Indirect Contacts Youth
<b>Actual</b>	1500	3000	1200	1500

**2. Number of Patent Applications Submitted (Standard Research Output)**

**Patent Applications Submitted**

Year: 2013  
 Actual: 0

**Patents listed**

**3. Publications (Standard General Output Measure)**

**Number of Peer Reviewed Publications**

<b>2013</b>	<b>Extension</b>	<b>Research</b>	<b>Total</b>
<b>Actual</b>	7	6	13

**V(F). State Defined Outputs**

**Output Target**

**Output #1**

**Output Measure**

- Greater understanding of diet, physical activity, and health  
Not reporting on this Output for this Annual Report

**Output #2**

**Output Measure**

- Increase opportunities for physical activity  
Not reporting on this Output for this Annual Report

**Output #3**

**Output Measure**

- Improve nutrient intake of school meals among students at one elementary school  
Not reporting on this Output for this Annual Report

**Output #4**

**Output Measure**

- Anthropometric measurements and other data collected from children 2-8 years old and their caregivers

<b>Year</b>	<b>Actual</b>
2013	960

**Output #5**

**Output Measure**

- Community champions/role models trained using regionally-developed training guide

<b>Year</b>	<b>Actual</b>
2013	20

**Output #6**

**Output Measure**

- Conduct focus groups composed of parents, teachers, child care providers, and community leaders in 4 communities

<b>Year</b>	<b>Actual</b>
-------------	---------------

2013 12

**Output #7**

**Output Measure**

- Physical activity workshops held for elementary and Head Start teachers and administrators from identified villages

<b>Year</b>	<b>Actual</b>
2013	50

**V(G). State Defined Outcomes**

**V. State Defined Outcomes Table of Content**

O. No.	OUTCOME NAME
1	Pilot "Recess Before Lunch" at one public elementary school
2	Lighting system will be turned on and available for use by the general public one night a week.
3	Social marketing/awareness campaign on the burden of non-communicable diseases/lifestyle diseases and role of diet and physical activity
4	Quantify progress in schools that participate in Youth Engaged in Advancing Health Project.
5	Empower community role models to take the lead in promoting health in their respective communities/villages
6	Teachers of young children increase physical activity opportunities during school day

### **Outcome #1**

#### **1. Outcome Measures**

Pilot "Recess Before Lunch" at one public elementary school

Not Reporting on this Outcome Measure

### **Outcome #2**

#### **1. Outcome Measures**

Lighting system will be turned on and available for use by the general public one night a week.

Not Reporting on this Outcome Measure

### **Outcome #3**

#### **1. Outcome Measures**

Social marketing/awareness campaign on the burden of non-communicable diseases/lifestyle diseases and role of diet and physical activity

Not Reporting on this Outcome Measure

### **Outcome #4**

#### **1. Outcome Measures**

Quantify progress in schools that participate in Youth Engaged in Advancing Health Project.

Not Reporting on this Outcome Measure

### **Outcome #5**

#### **1. Outcome Measures**

Empower community role models to take the lead in promoting health in their respective communities/villages

#### **2. Associated Institution Types**

- 1862 Extension
- 1862 Research

**3a. Outcome Type:**

Change in Action Outcome Measure

**3b. Quantitative Outcome**

<b>Year</b>	<b>Actual</b>
2013	15

**3c. Qualitative Outcome or Impact Statement**

**Issue (Who cares and Why)**

Previous attempts to improve the health of people in the CNMI have not been as successful as anticipated. One i

**What has been done**

A role model training manual was developed with the input of content experts and contextualization input from CNMI extension agents. The manual was tested and feedback was solicited from potential end-point users. Role models were identified based on feedback from the Local Advisory Council, key informants, and relevant agencies. Three trainings were held: one to train identified individuals on how to "role model" healthy behavior, one training for role models on motivational interviewing, and one master role model training which was attended by 4 "leader role models".

**Results**

As a result of the trainings, two role model groups were formed for the villages of Kagman and Tanapag, Achugao, San Roque, and As Matuis (TASA). A weekly village walk was initiated by the Kagman role models. The walk is attended by around 20-40 families. Around 75% of the families did not use the pathway prior to the role model initiated weekly village walk. The TASA role models formed a registered non-profit group and submitted a grant application to run a summer youth camp. The grant was approved. The camp focused on encouraging healthy behaviors including drinking water, consuming fruits, and vegetables, and increasing physical activity. Tip sheets were distributed on healthy behaviors to promote with children to parents of camp attendees. As a result of the success of the summer camp, the role models decided to extend the camp beyond summer. Around 20-25 children attended and/or continue to attend the camp.

**4. Associated Knowledge Areas**

<b>KA Code</b>	<b>Knowledge Area</b>
703	Nutrition Education and Behavior
724	Healthy Lifestyle

## **Outcome #6**

### **1. Outcome Measures**

Teachers of young children increase physical activity opportunities during school day

### **2. Associated Institution Types**

- 1862 Extension
- 1862 Research

### **3a. Outcome Type:**

Change in Action Outcome Measure

### **3b. Quantitative Outcome**

<b>Year</b>	<b>Actual</b>
2013	30

### **3c. Qualitative Outcome or Impact Statement**

#### **Issue (Who cares and Why)**

Regular physical activity in childhood helps to control weight, improves strength and endurance, and reduces anxiety and stress. Research also suggests that developmentally appropriate physical activity can enhance the learning and cognition of children.

#### **What has been done**

Three practical, hands-on, research-based work-shops entitled, "Creating a win-win for Academic Achievement and Health Outcomes", were held for early childhood and elementary school teachers and administrators. The training is the first part of an integrated approach to increase physical activity during school hours. The remainder of the aforementioned approach will take place in FY 2014.

#### **Results**

Around 75% of the teachers who attended the trainings reported integrating more physical activity into their teaching post-trainings. As a result of the effectiveness of the methods learned at the trainings, one administrator has ordered recommended, research-based curriculum materials to encourage more physical activity integration.

In Spring of 2015, 2-10 year old children from pre-identified sites will again wear Actical accelerometers to see if moderate and/or vigorous intensity physical activity during school hours was increased as a result of the trainings. This will be done as part of a 5 year multi-state research project.

### **4. Associated Knowledge Areas**

<b>KA Code</b>	<b>Knowledge Area</b>
----------------	-----------------------

---

724 Healthy Lifestyle

### **V(H). Planned Program (External Factors)**

#### **External factors which affected outcomes**

- Economy
- Appropriations changes
- Public Policy changes
- Competing Public priorities
- Competing Programmatic Challenges
- Other (Collaboration)

#### **Brief Explanation**

The collaboration between the Childhood Obesity Program and the Public School System, Head Start Program, University of Hawaii, CNMI Women, Infants, and Children Program (CNMI WIC), Diocese of Chalan Kanoa, community members (role models), Let's Move Marianas, and the Northern Marianas College Nursing Department played an integral role in achieving the outputs and outcomes associated with this program. Despite the unfavorable economic conditions, the willingness of the aforementioned agencies made the programming possible.

### **V(I). Planned Program (Evaluation Studies)**

#### **Evaluation Results**

The major evaluation associated with this program will take place in 2015. In early 2015, 24-month data collection will take place. The results of the 24-month anthropometric measurements will be compared against baseline anthropometric measurements to determine if BMI changed as a result of the interventions/programming conducted in identified villages/communities. The following behavioral outcomes will also be measured at 24-month data collection: increase in fruit and vegetable consumption, increase in water intake, increase in moderate/vigorous intensity physical activity, increase sleep, decrease sugar-sweetened beverage consumption, and decrease recreational screen time.

#### **Key Items of Evaluation**

The successes that were realized this reporting year can be largely attributed to the partnerships and collaborative relationships that extension agents have been able to develop and foster over the years. Developing community role models is a process, that when done properly, can yield impact in both the short and long terms. In the CNMI, each village has at least several community residents who are interested in improving the collective health and wellness of the village they call "home". Focusing on the health and wellness of children can provide the impetus to empower communities to take the lead in improving the health of all village residents.