

## Information Collection Request

New

Evaluation of the Chronic Disease Self-Management Program in the US Affiliated Pacific Islands

Supporting Statement: Part B

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May 28, 2019

## TABLE OF CONTENTS

### **B. CLASSIFICATION OF INFORMATION EMPLOYING STATISTICAL METHODS**

- B1. Respondent Universe and Sampling Methods
- B2. Procedures for the Collection of Information
- B3. Methods to Maximize Response Rates and Deal with Non response
- B4. Test of Procedures or Methods to be Undertaken
- B5. Individuals Consulted on Statistical Aspects and individual Collecting and/or Analyzing Data

### **REFERENCES**

### **ATTACHMENTS**

- 1 Authorizing Legislation Section 301(a) of the Public Health Services Act [42.U.S.C. 242K]
- 2 60-day Federal Register Notice
- 3 Data Collection and Data Flow Process
- 4 Chronic Disease Self-Management Workshop Evaluation
- 4(a) Chronic Disease Self-Management Workshop Questionnaire
- 5 CDSMP Evaluation Consent Form
- 6 Participants in Consultation Outside the Agency
- 7 Institutional Review Board Approval Notification or exemption determination
- 8 Privacy Impact Assessment

## **B. COLLECTION OF INFORMATION EMPLOYING STATISTICAL METHODS**

### **B1. Respondent Universe and Sampling Methods**

CDSMP is a 6-week group-based educational workshop aimed to improve eligible participants' knowledge and ability to self-manage chronic disease. The workshops focus on helping participants learn strategies to manage chronic disease, including techniques to deal with problems such as frustration, fatigue, pain and isolation; appropriate exercise for maintaining and improving strength, flexibility, and endurance; and appropriate use of medications among others. The goal of this study is to evaluate the implementation of Stanford University's Chronic Disease Self-Management Program (CDSMP) in the US Affiliated Pacific Islands. These jurisdictions include American Samoa, Guam, the Commonwealth of the Northern Mariana Islands, the Republic of Palau, the Republic of the Marshall Islands, and the Federated States of Micronesia. The purpose of this evaluation is to examine if this program can be effective for people in the USAPIs to better manage their chronic conditions. The program will be offered repeatedly over the course of two years.

We will survey all participants enrolled in CDSMP workshops across the US Affiliated Pacific Island jurisdictions. Eligible participants include any person living in USAPIs with chronic health problems. USAPIs recruit participants through a variety of methods, including word of mouth and NCD clinic referrals. Recruitment will occur through health care professionals in clinics and hospitals. Patients with chronic diseases will be referred to the program for participation and can elect to voluntarily participate. There are six island jurisdictions and we anticipate each island hosting 2-4 workshop series a year. There will be approximately 10-20 participants per workshop series.

Surveying all participants will help us understand participant satisfaction with the program and self-reported outcomes. If we survey a subset of participants, we may not be able to obtain enough data to make inferences because the sample size is small. Each island may have 20-40 participants per year or a total of 480 for all jurisdictions. We also do not have a way to select a subset of participants because there will be 6 jurisdictions implementing the survey. In addition, it would not be culturally appropriate to survey some participants and not others. All participants would have to be given the opportunity to complete a survey.

### **B2. Procedures for Collection of Information**

We will be using two data collection instruments: Chronic Disease Self-Management Workshop Evaluation Form and Chronic Disease Self-Management Questionnaire. More information on each instrument is provided below:

Chronic Disease Self-Management Workshop Evaluation Form: This is a questionnaire to assess program participant satisfaction with CDSMP. A paper questionnaire will be administered at the end of the 6 week workshop. No identifying information is collected. Results will be used to assess satisfaction with the delivery of CDSMP and to identify ways to improve the delivery of CDSMP.

Chronic Disease Self-Management Questionnaire: This is a pre-post questionnaire for CDSMP program participants. It will assess chronic disease related symptoms and health behaviors before CDSMP and at the end of the 6 week workshop. A paper questionnaire will be administered at the start of and at the end of the 6 week workshop. Identifying information includes the participant name, which is collected to compare the two questionnaires to each other. However, administrators will have the name alone on a cover sheet that can be torn off after the number is written on the questionnaire (and double-checked). A scanned copy of the

questionnaire will be electronically submitted to CDC using the Citrix Sharefile drobox and will be de-identified, including only the participants' assigned number. Names will not be used in the data analysis; data will be aggregated and unidentifiable. Results will be used to compare changes in health behavior and chronic disease related symptoms from the start of the workshop to the end of the workshop.

The CDC will provide CDSMP leaders with the questionnaire instruments. CDSMP leaders will administer consent forms and questionnaires to participants during their workshops. They will not be sending invitations to participants because the participants will be enrolled in workshops. CDSMP leaders will submit copies of completed questionnaires to the CDC after redacting respondent names. The CDC will not receive identifying information.

### **B3. Methods to Maximize Response Rates and Deal with Non Response**

We anticipate at least an 80% response rate based on the following:

- The time to take the questionnaire is 15 minutes or less.
- Participants will be asked to fill out the questionnaire during their workshop; this will not require additional time from participants.

### **B4. Test of Procedures or Methods to Be Undertaken**

Both data collection instruments have been adapted from the Hawai'i Office on Aging Ke Ola Pono – Better Choices Better Health Program and Stanford University's Chronic Disease Self-Management evaluation instruments. Most of Stanford University's evaluation instruments have been validated and are available for public use on their website. These evaluation instruments have been used by other agencies, such as the Administration on Aging, have used these evaluation instruments. In addition, the Hawai'i Office on Agency Ke Ola Pono – Better Choices Better Health Program data collection tools are adapted from Stanford University's CDSMP evaluation instruments.

Outcomes will be measured with a pre-tested administered version of the questionnaire on chronic disease self-management study measures. This includes four primary classifications of outcome variables (health behaviors, health status, self-efficacy, and health service utilization), which enable a description of how well people are managing their chronic disease. The four categories of 20 outcome variables are: (1) self-management behavior change score (exercise, practice of cognitive symptom management, and communication with doctor); (2) self-efficacy score (self-efficacy to manage disease in general and self-efficacy to manage symptoms); (3) health status (self-rated health, health distress, shortness of breath, pain, disability, depression, energy and fatigue, and social and role activity limitations); and (4) health service utilization (visits to physicians, visits to emergency departments, number of hospital stays, and nights spent in hospital). Each category will be summed, providing one score for each domain/category. The questionnaire will be completed by participants at baseline and at the end of the 6 week period.

We plan to use multi-level modeling with repeated measures in SAS to analyze the data. This modeling technique will allow us to leverage power generated from collecting data at the individual level, while taking into account the nested nature (e.g. recipient location) and various time intervals for data collection. We will examine the extent to which CDSMP workshop accounts for the variance in the four outcome scores (e.g. self-

management behavior, self-efficacy, health status, and health service utilization), while holding constant participant demographic variables.

While we are not collecting data that directly assess medical literacy, which may be a confound variable, though we are collecting participant demographic variables (e.g. age, home language, education) that may be used predictor variables.

#### **B5. Individuals Consulted on Statistical Aspects and Individuals Collecting and/or Analyzing Data**

The following individuals will be involved in data collection and analysis:

- Designed the Data Collection: Celeste Chung, CDC
- Will Collect the Data:
  - o Daphne Fale and Farrah Lesa: American Samoa Department of Public Health
  - o Amber Mendiola, Nikki Sablan, Rebecca Robles: CNMI Commonwealth Healthcare Corporation
  - o Patrick Luces, Lyanne Muna, and Melliza Young: Guam Department of Public Health and Social Services
  - o Faith Ngirhomlei, Minda Benjamin, and Jane Olsudong: Palau Ministry of Health
  - o Carlinda Jabjulan Helai and Johannes Seremai: RMI Ministry of Health
  - o Selma Primo, Rosalina Suta, Mercedes Gilmete, Mary-Allen Silbanuz, and Moira Shomour: FSM Department of Health and Social Affairs
- Will Analyze the Data: Elizabeth Adams, CDC

#### **References**

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