



Chronic Disease Self-Management Program for AAPI Elders

The National Asian Pacific Center on Aging (NAPCA) is the nation's leading direct service and advocacy organization serving Asian Americans and Pacific Islanders (AAPI) as they age. In 2009, NAPCA received funding from the U.S. Department of Health and Human Services Administration on Aging (AoA) to address health disparities among AAPI elders by facilitating access to evidence-based health promotion and disease prevention programs. The highlight of this initiative was implementation of the Chronic Disease Self-Management Program (CDSMP) in AAPI communities.



Chronic Disease Self-Management Program

CDSMP was developed by Stanford University Patient Education Research Center and has over 10 years of research supporting its effectiveness at improving self-management of chronic conditions. The program is based on the concept of self-efficacy, or a person's confidence that he or she can learn and master new skills to better manage or "take control" of their health. Participants who complete the workshop learn skills to help them manage their health conditions, like relaxation techniques for symptom management and setting specific, measurable goals to improve their health.



CDSMP by the Numbers

6 week program

- Covered topics include nutrition, exercise, and goal-setting

2 peer leaders per group

- Trained by certified master trainers

15 participants per group

- Encourage group sharing and interaction

NAPCA CDSMP

341 participants completed NAPCA CDSMP workshops

Chronic Disease and AAPI Elders

Chronic disease is a significant burden among older adults, with about 91 percent of older adults with at least one chronic condition, and 73 percent with multiple chronic conditions.¹

Although available data indicates AAPIs have a longer life expectancy and are generally healthy, some studies and disaggregated data suggest the impact of chronic disease varies among AAPI subgroups. Underserved and low-income AAPIs in the U.S. have low English proficiency and low health literacy. AAPI communities face cultural and linguistic barriers to accessing mainstream health information and chronic disease management programs. Thus, many AAPI older adults have little knowledge about chronic disease management due to a lack of in-language or culturally-relevant health promotion.



This class has taught me a lot about my chronic disease, diabetes, and not being healthy. This class has changed my way of eating and now I eat healthy foods, such as salads and vegetables, and I have reduced cooking in oil. I want to be healthy and not have diabetes. After taking this class, I am more confident and making the right choices.

— Ny Chann, age 57 (Cambodian)

AAPIs and Chronic Disease

- Leading causes of death among Asian American and Pacific Islander elders (55+) are 1) cancer, 2) heart disease, and 3) stroke.²
- Diabetes among older Korean Americans is four times higher than the general older adult population.³
- Cambodians are at high risk for heart disease.⁴
- 48 percent of Cambodian elders have a physical disability.⁵
- Obesity and overweight are prevalent among Pacific Islanders, increasing their risk for chronic conditions such as heart disease and stroke.^{6,7}

NAPCA CDSMP Partnerships

Previous outreach experience of NAPCA's toll-free multilingual Helpline and other related projects has shown the importance of working with local AAPI-serving community-based partners to reach our target populations. It is through effective partnerships with local community-based organizations (CBOs) that NAPCA has been able to successfully implement programs and outreach efforts serving AAPI elders, such as the Senior Community Service Employment Program (SCSEP) and Medicare outreach for AAPI elders.

NAPCA collaborated with five CBOs to offer CDSMP workshops to AAPI elders (Figure 1). While CDSMP has been disseminated widely throughout the United States, very few workshops were accessible to AAPI elders with limited English proficiency. With such great need for this workshop for AAPI elders nationally, NAPCA decided to focus first on underserved AAPI populations with significant health disparities.

To date, NAPCA and its partners have conducted 24 workshops with over 340 participants completing the workshop (attending four or more of the six weekly sessions) (Table 1).

Figure 1: NAPCA CDSMP Partnerships



Table 1: NAPCA CDSMP Participation and Completion Rates by Partners

Community Organization	Number of Workshops	Total Participants	Participants Completing Workshops	Completion Rate
Cambodian Association of Greater Philadelphia	4	58	35	60.3%
Greater Philadelphia Overseas Chinese Association	4	85	65	76.4%
Philip Jaisohn Memorial Foundation (Korean)	4	75	62	82.7%
Samoan Federation of America	6	105	99	94.3%
United Cambodian Community	6	90	80	88.9%
Total	24	413	341	82.6%

Note: Completion is defined as attending at least four of the six workshop sessions.

NAPCA CDSMP Workshop Participant Demographics

Beginning in 2011, CDSMP workshop participants were asked to complete demographic information surveys.



Workshop Participant Demographics

Participants who completed survey	269
Low-income participants	78%
Participants on Medicaid	60%
Most commonly reported chronic conditions:	
1. Hypertension	50%
2. Diabetes	35%
3. Arthritis/rheumatic disease	35%
Cambodian participants who reported depression or anxiety	30%

NAPCA CDSMP Workshops

CDSMP workshops were conducted by the local community partner with support from NAPCA. Community partners identified and recruited lay leaders for their CDSMP workshops. Workshops were facilitated by trained bilingual/bicultural leaders or with the assistance of interpreters. While standard practice is to recruit volunteers to facilitate CDSMP workshops, NAPCA partners often had staff trained as leaders because of difficulty finding qualified bilingual volunteers. Leaders attended four-day trainings hosted by Kaiser Permanente in California and Philadelphia Corporation on Aging in Philadelphia.

Partner organizations recruited participants for the workshop from their other programs and through senior housing and health centers. The Samoan Federation of America also utilized a Samoan radio program for recruitment and outreach.

Although the CDSMP workshop was highly structured, leaders at partner organizations were encouraged to make cultural adaptations to the curriculum, while maintaining fidelity to the overall program. Most organizations adopted the CDSMP name commonly used in their region and by the organization that hosted their leader training (“Healthier Living”

in California and “Help Yourself to Health” in Philadelphia). Leaders were also encouraged to use cultural examples when appropriate. For example, leaders included examples from traditional diets during discussions about healthy eating.

NAPCA CDSMP Translated Materials

In addition to providing CDSMP workshops, NAPCA also translated other materials for implementation of CDSMP into AAPI communities:

1. CDSMP Leader Manual in Khmer

Translated manuals enable lay leaders to facilitate the program to LEP Cambodian elders in Khmer. This translated manual adds to the growing collection of CDSMP Leader Manuals in other languages, including Chinese, Korean, and Vietnamese.

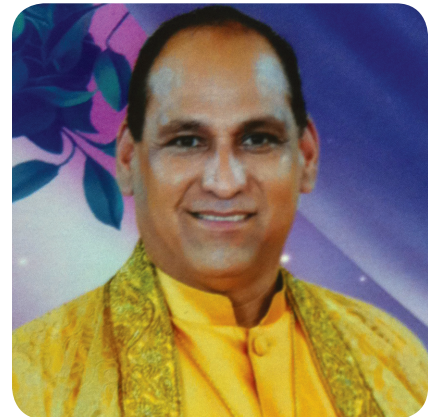
2. Participant Information Surveys in Chinese, Korean, and Khmer

NAPCA translated surveys used nationally by other organizations to collect CDSMP participant demographics. These bilingual surveys are now available in Chinese/English, Korean/English, and Khmer/English. Bilingual forms allow both participants with limited English proficiency to complete the surveys with or without the assistance of interpreters and for program staff to answer questions or enter data in English.

3. NAPCA Health Status Evaluation Survey (see p. 6)

Since I was introduced to the Chronic Disease Self-Management Program by NAPCA, I fell in love with this program. As a survivor of cancer and still on medication, this has kept me on track in being healthy. . . . This class teaches me and reminds me to follow and continue to use the knowledge I have learned from this program. I love teaching the symptom cycle and how we can take control of life ourselves. The classroom brainstorming lessons really get everyone involved and excited.

— Raymond Chavarria, CDSMP Leader at
United Cambodian Community



NAPCA CDSMP Evaluation

Although the CDSMP curriculum has been well-researched and is evidence-based, NAPCA found that there have been very few studies about the effectiveness of the program among Asian Americans and Pacific Islanders. NAPCA conducted a small pilot study to measure the impact of the workshop on a sample of NAPCA's CDSMP participants.

Participants from four CDSMP workshops were asked to complete the health status survey prior to taking the workshop and again six to eight weeks later, after completing the workshop. While the findings of our pilot study are limited to this group of participants, they provide a basis for further development of evaluation tools for health programs for AAPI elders and further research on the impact of CDSMP in AAPI elder communities.

NAPCA developed a health status survey using several scales that were recommended by the Stanford University Patient Education Research Center to evaluate CDSMP, as well as other health measures. The survey also covered basic demographic questions and asked participants to identify their chronic conditions.

Evaluation Survey Translation Method



The health surveys were translated into Chinese and Korean by NAPCA staff using a modified consensus translation method. Two translators for each language independently translated the survey from English. After translating the surveys, the translators compared translations. If there were any discrepancies in translations, the interpreters, with the assistance of an arbitrator, would come to a consensus decision on the final translation. The surveys were then tested among native language speakers and any questions were brought to a translator for review. Cambodian/Khmer translations were performed by an outside professional translator and reviewed by United Cambodian Community staff.

Evaluation Sample Participant Characteristics

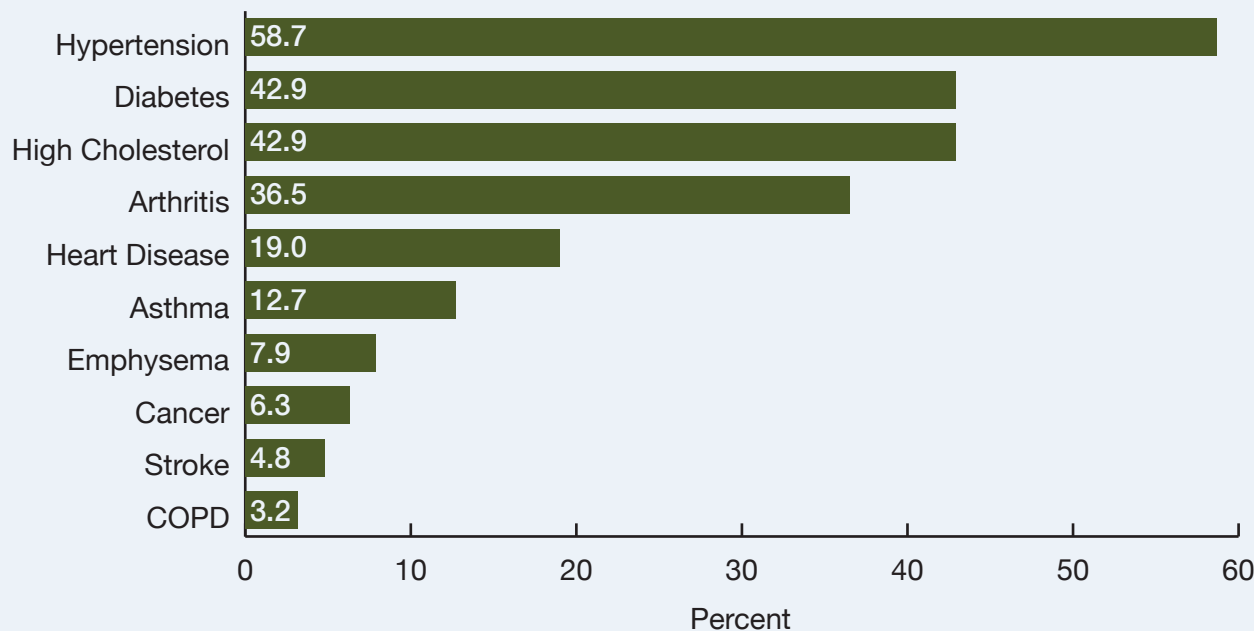
A small sample of the total CDSMP participants completed at least one health status survey. The average age of participants was 66 years and the majority of participants were women. Almost all the participants were foreign-born and spoke English “less than very well.”

Evaluation Participant Characteristics

65 participants	75% women
31% Cambodian	Mean age: 66
25% Chinese	99% foreign-born
15% Korean	Average number of years in the U.S.: 24
22% Samoan	94% speak English “less than very well”

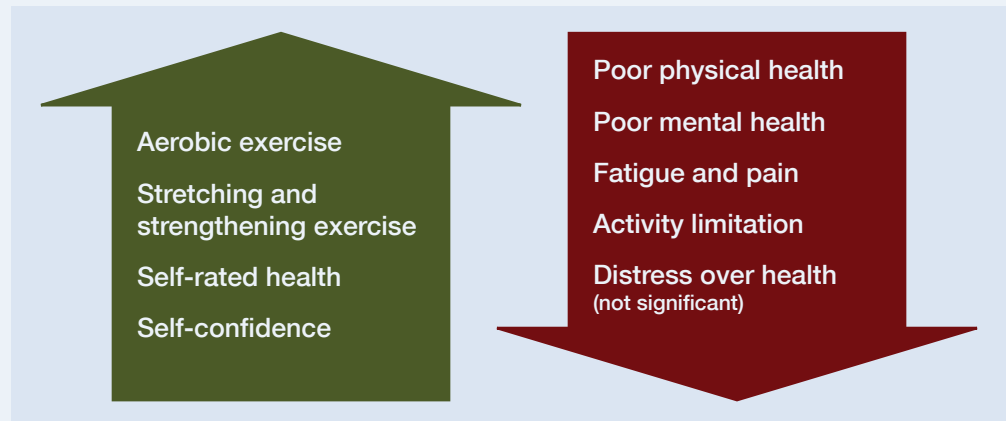
Most participants reported at least one chronic condition, and many reported having multiple chronic conditions (Figure 2). Hypertension, diabetes, and high cholesterol were the most commonly reported chronic conditions among this group of health impact evaluation participants. There were also a high number of participants who reported having heart disease or arthritis/rheumatic disease.

Figure 2: Chronic Conditions among Evaluation Sample Participants



Health Benefits of CDSMP for AAPI Elders

Figure 3: Improved Health Status and Health Behaviors in AAPI Elders



Fifty-three participants completed both pre- and post-workshop health status surveys. CDSMP participants experienced better health after completing the workshop (Table 2). On average, there was a decrease in the number of days participants felt physically or mentally unwell. Also, the number of days that their physical or mental health kept them from doing their usual activities declined. Participants reported a slight decrease in how much their health interfered with daily activities. Participants' health distress also decreased slightly, but this change was not significant. Participants also reported a decrease in fatigue and pain and better overall health.

Table 2: Change in Health Status after CDSMP Workshops among AAPI Elders

n=53	Pre-Workshop	Post-Workshop	Change	Statistical Significance
Number of unhealthy days in past 30 days	15.00	14.24	-1.22	*
Days of activity limitation in past 30 days	8.85	8.28	-1.60	*
Activity limitation in past two weeks (0-4, higher score indicates greater activity limitation)	1.97	1.68	-0.34	*
Health distress (0-5, higher score indicates more distress)	2.56	2.38	-0.19	N.S.
Fatigue (1-10, higher score indicates more severe fatigue)	5.60	4.82	-1.13	***
Pain (1-10, higher score indicates more severe pain)	5.21	4.64	-0.76	*
Self-Rated Health (1-5, higher score indicates worse health)	3.90	3.60	-0.08	***

Note: Statistical significance was assessed using paired t-tests.
 *p<0.05; **p<0.01; ***p<0.001; N.S.=Not Significant

Program participants also increased their healthy behaviors (Table 3). On average, participants reported spending an extra 94 minutes per week in aerobic exercise, and an additional 19 minutes per week in strengthening or stretching exercise. They also reported higher levels of confidence in their ability to manage their chronic illnesses (self-efficacy).

Table 3: Change in Health Behaviors after CDSMP Workshops among AAPI Elders

n=53	Pre-Workshop	Post-Workshop	Change	Statistical Significance
Aerobic exercise (minutes/week)	84.3	182.9	94.4	***
Stretching/Strengthening exercise (minutes/week)	38.3	62.5	18.7	*
Self-efficacy (1-10, higher score indicates higher self-efficacy)	5.5	6.9	1.7	***

Note: Statistical significance was assessed using paired t-tests.

*p<0.05; **p<0.01; ***p<0.001; N.S.=Not Significant



CDSMP graduation at the annual United Cambodian Community health fair in Long Beach, California, August 2010.

Participants Report Healthy Lifestyle Changes

Participants found the workshops to be helpful and reported lifestyle changes to improve their health. They found that developing action plans, helped them to make positive changes towards a healthy lifestyle. For example, Siosefa S. Malagamaalii, a 75-year-old man who took the Samoan CDSMP workshop said, “The action plan is encouraging me to stay focused on my exercise and diet. I can’t wait for each day to come, so I can do my action plan and continue to feel better.”

Participants felt they learned a lot from the workshop, especially on the importance of exercise and good nutrition. Many indicated that they were exercising more by walking or dancing, and some reported making changes in what they eat and how they prepare their meals. Overall, they enjoyed the workshop and were committed to making positive changes in their lives for their health.



CDSMP workshop at the Samoan Federation of America in Carson, California, March 2012.

Through this seminar, I realized the importance of exercise. I also realized that exercise can help improve my health when I am tired and sick. . . . I will also share this information with others around me.

— Eun Mi Cho, age 53 (Korean)

The information shared was so instrumental in controlling my diabetes and high blood pressure because of the action plan. I am actually doing something with a purpose.

— Marie Lewer Tago, age 65 (Samoan)



Conclusions

NAPCA found that CDSMP can be successfully implemented in Cambodian, Chinese, Korean and Samoan communities in the U.S. This program can be adapted for AAPIs by using culturally-relevant examples, adding cultural elements, and by training bilingual/bicultural lay leaders who are the same culture or trusted by the community. High demand for workshops and positive feedback from AAPI participants indicated that AAPI elders found CDSMP to be valuable. NAPCA's evaluation found that CDSMP was effective among our participants. Workshop participants experienced improved health and made positive lifestyle changes to manage their chronic conditions.

Acknowledgements

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- Cambodian Association of Greater Philadelphia
- Greater Philadelphia Overseas Chinese Association
- Philip Jaisohn Memorial Foundation
- Samoan Federation of America
- United Cambodian Community



Endnotes

1. National Council on Aging. (February, 2012). *Chronic Disease Self-Management Program: Fact Sheet*. Washington, D.C.: National Council on Aging. Retrieved July 25, 2012, from http://www.ncoa.org/improve-health/center-for-healthy-aging/content-library/NCOA-CDSMP-new-02_12.pdf.
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