A Collaborative Approach to Adapt Stanford's Diabetes Self-Management Program

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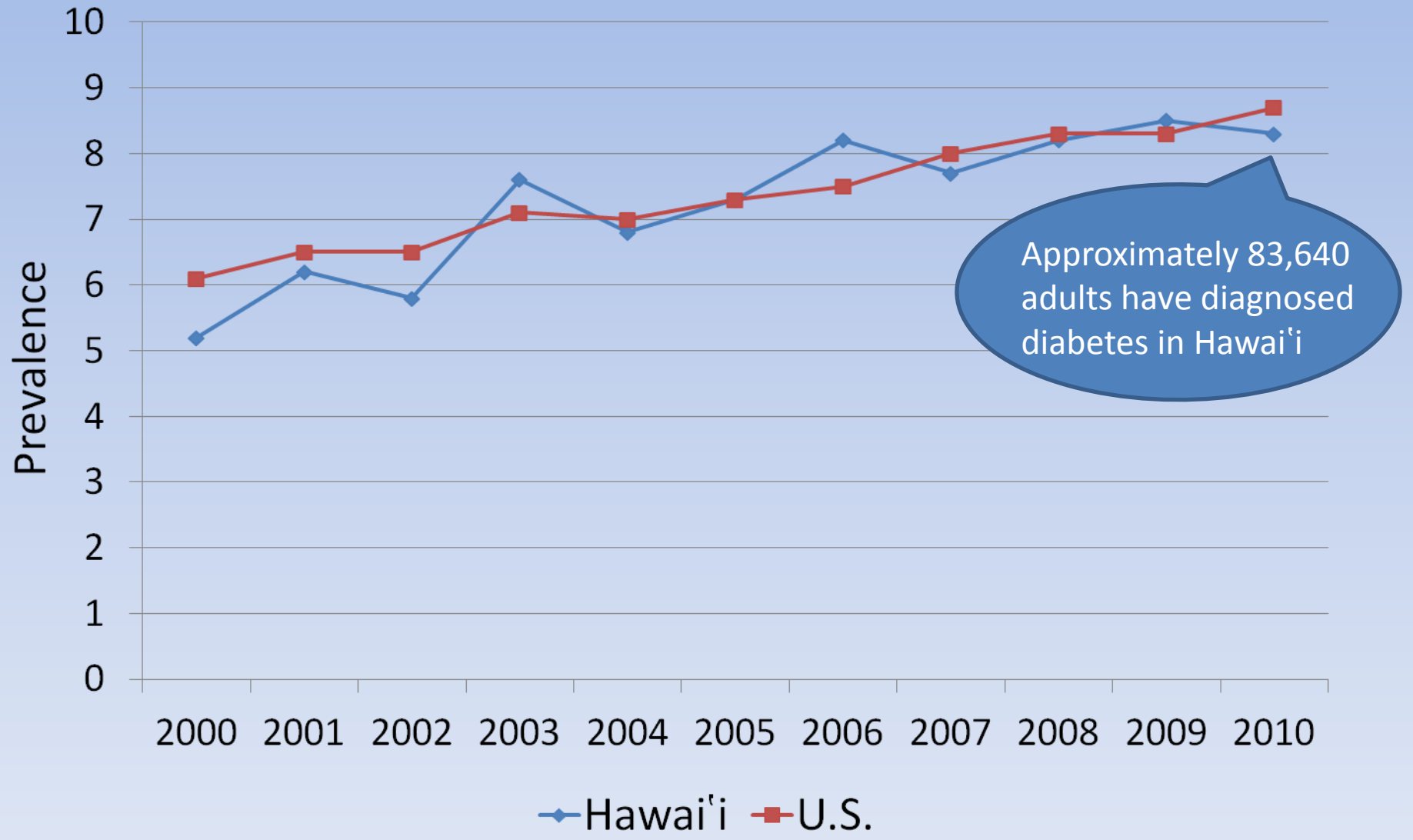
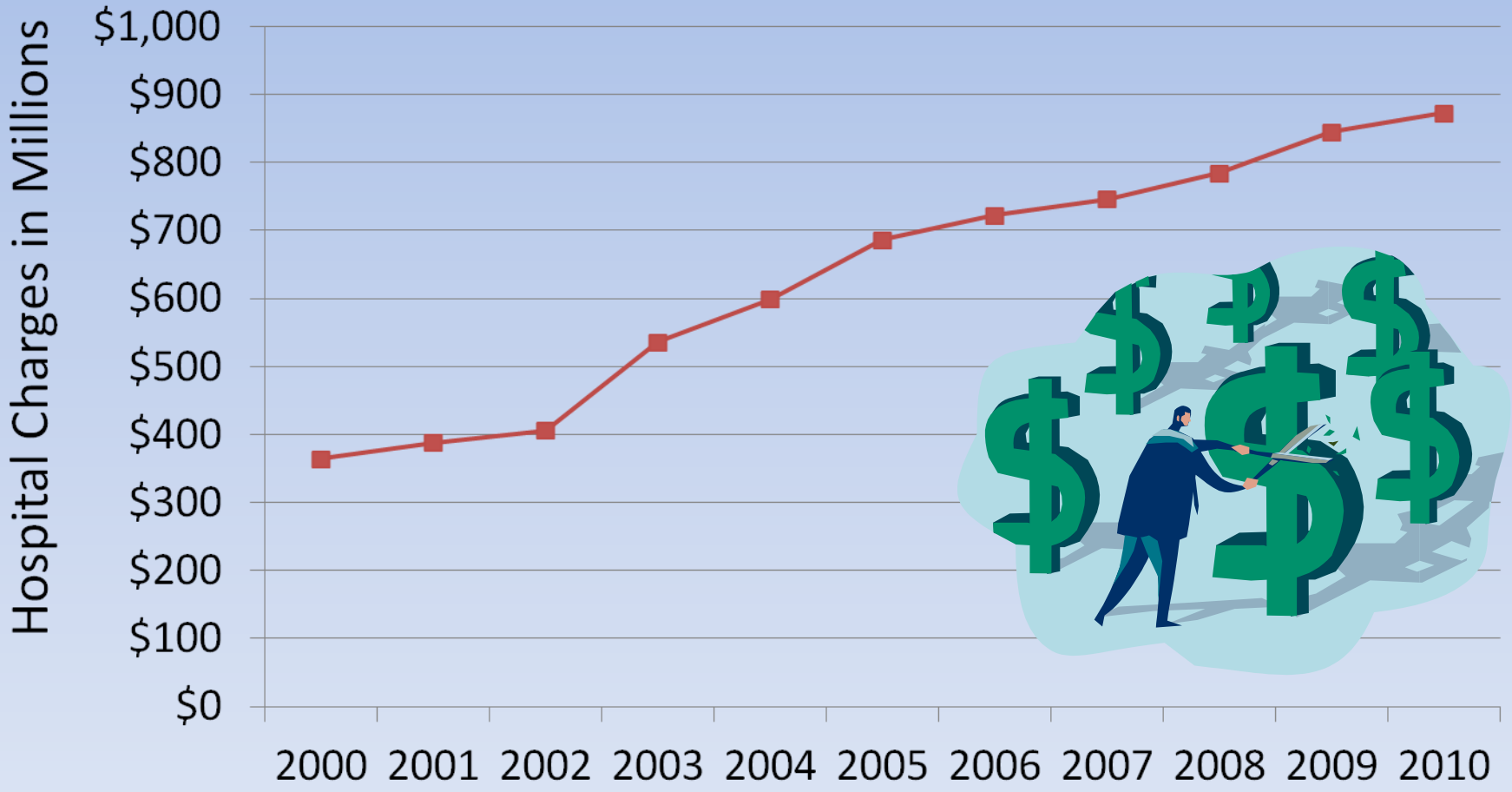
The Prevalence of Adult Diabetes has been Increasing in Hawai'i and the U.S.



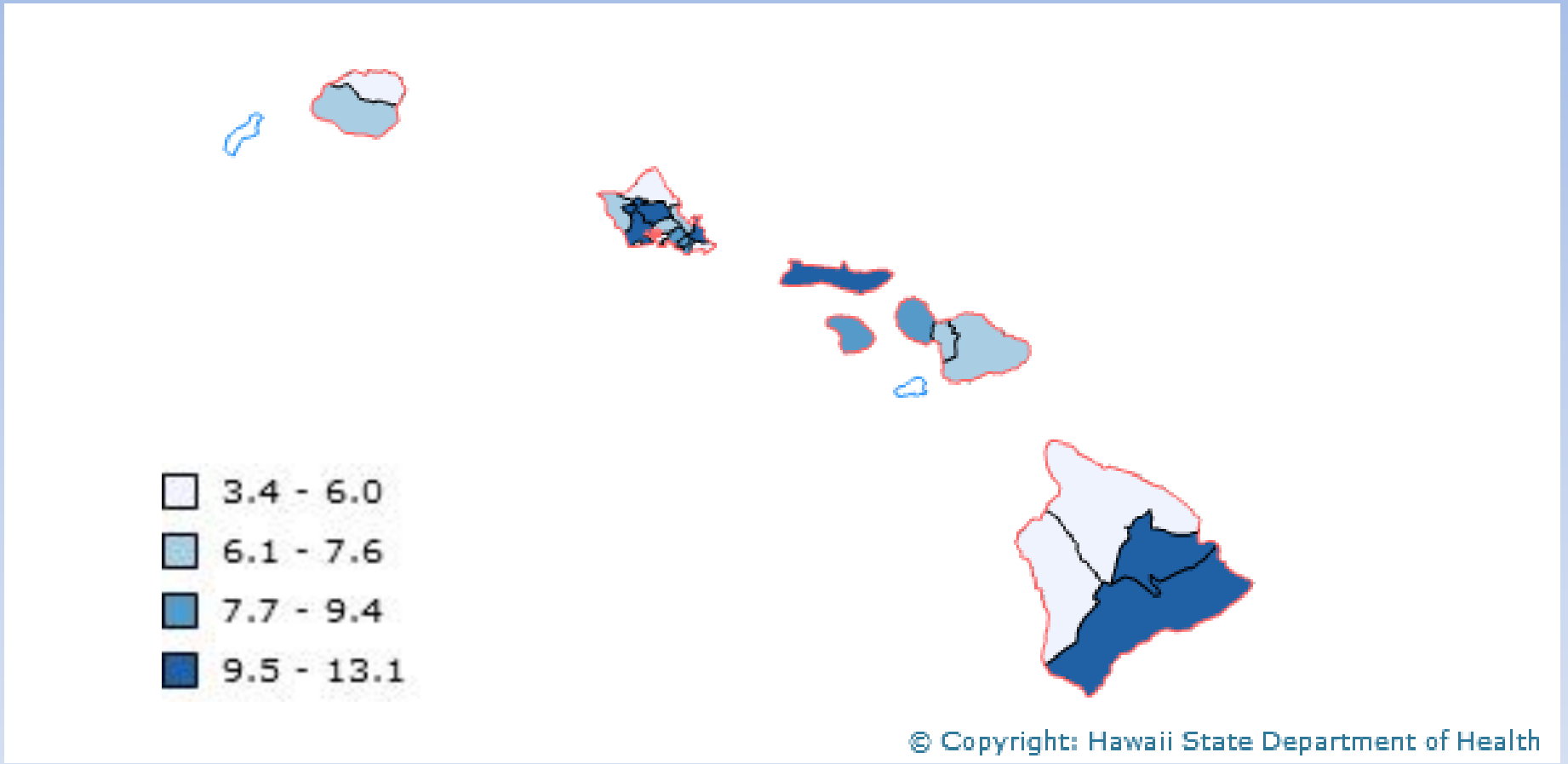
Source: Hawai'i State Department of Health, Behavioral Risk Factor Surveillance System; CDC BRFSS

Hospital Charges with a Primary or Contributing Cause of Diabetes have Increased 140% between 2000 and 2010 in Hawai'i



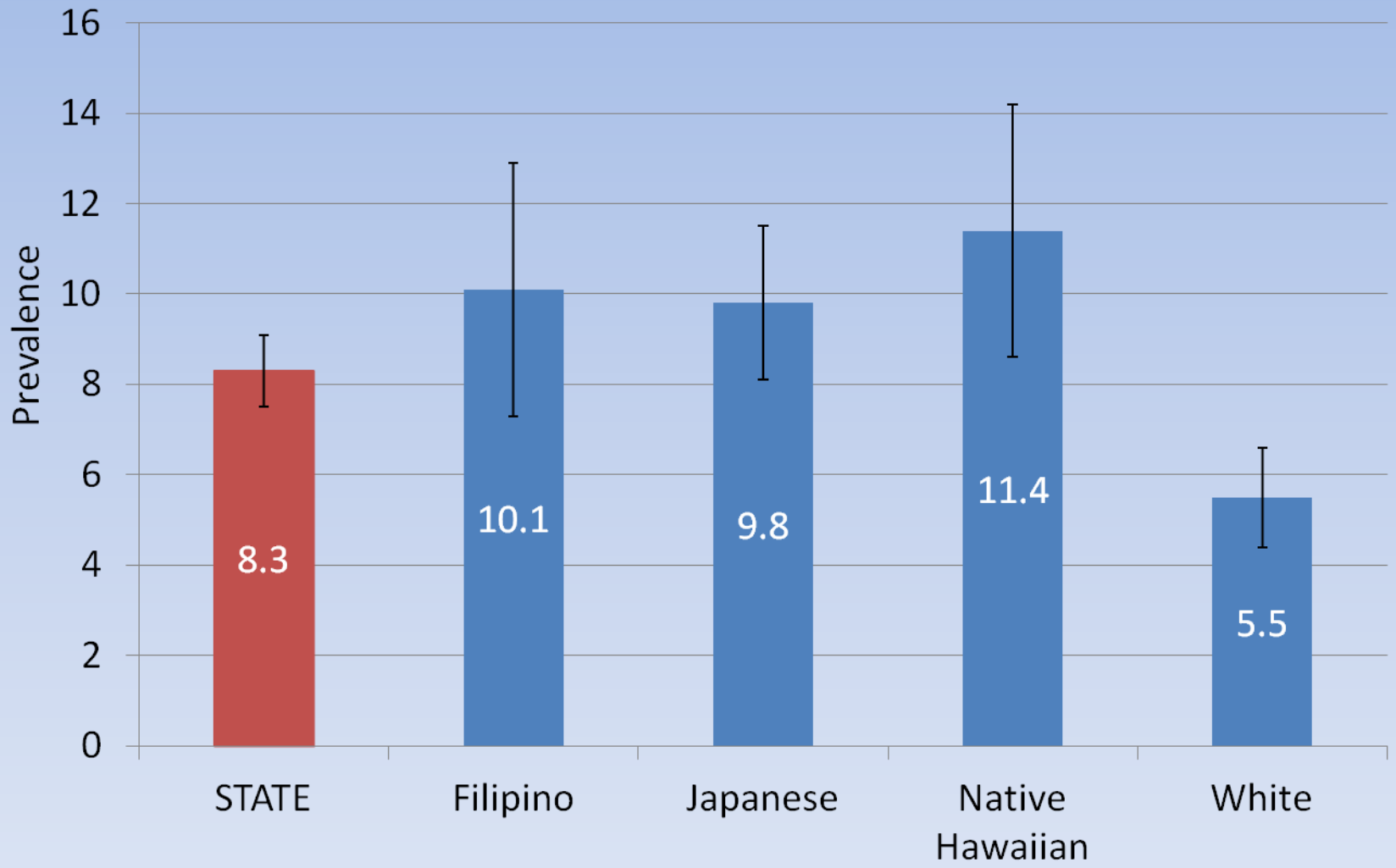
Source: Hawai'i Health Information Corporation

Geographic Disparities of Adult Diabetes Prevalence in Hawaiʻi, 2010



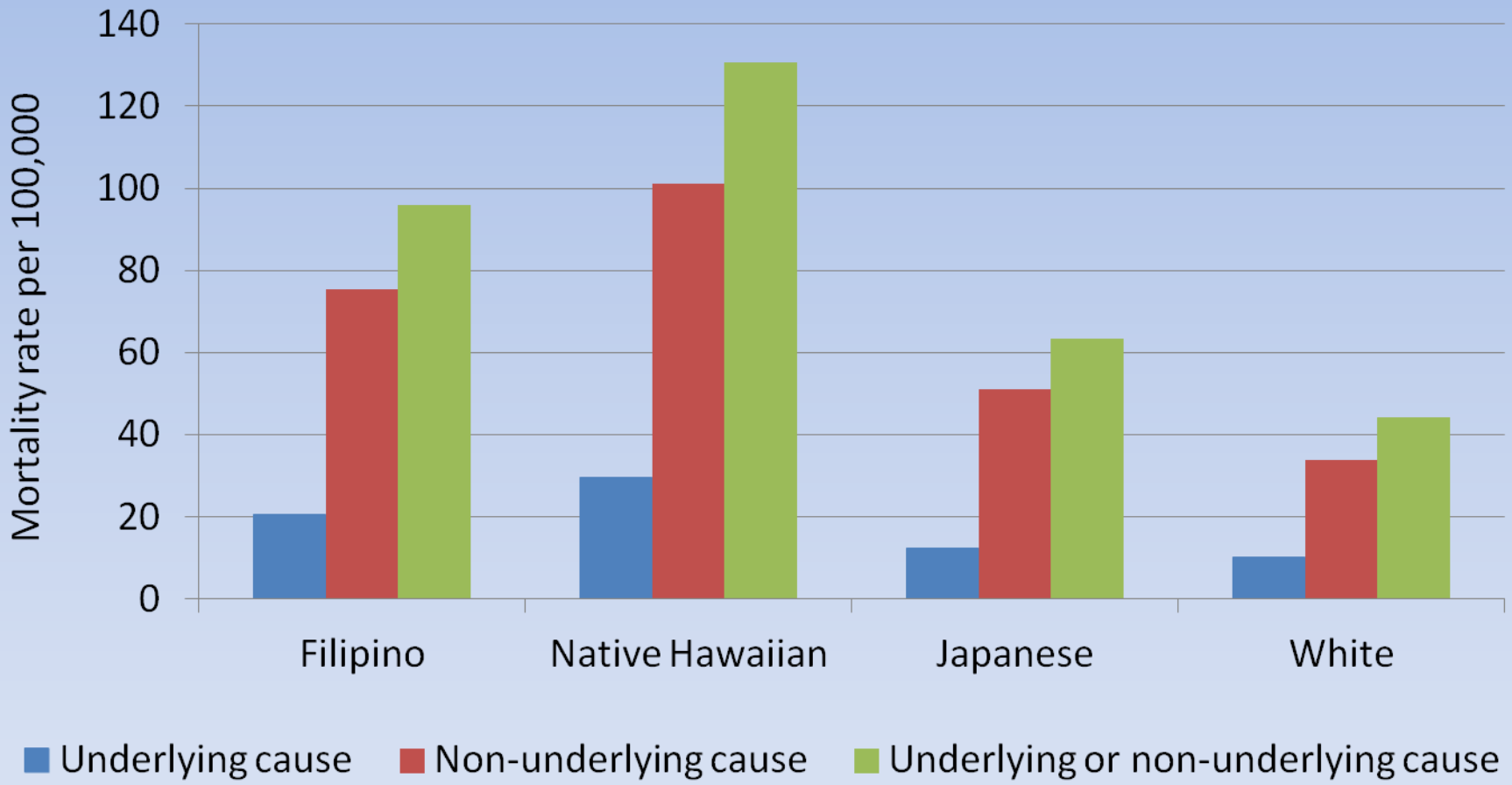
Source: Hawaiʻi State Department of Health, Behavioral Risk Factor Surveillance System

Prevalence of Adult Diabetes by Ethnicity, Hawaiʻi 2010



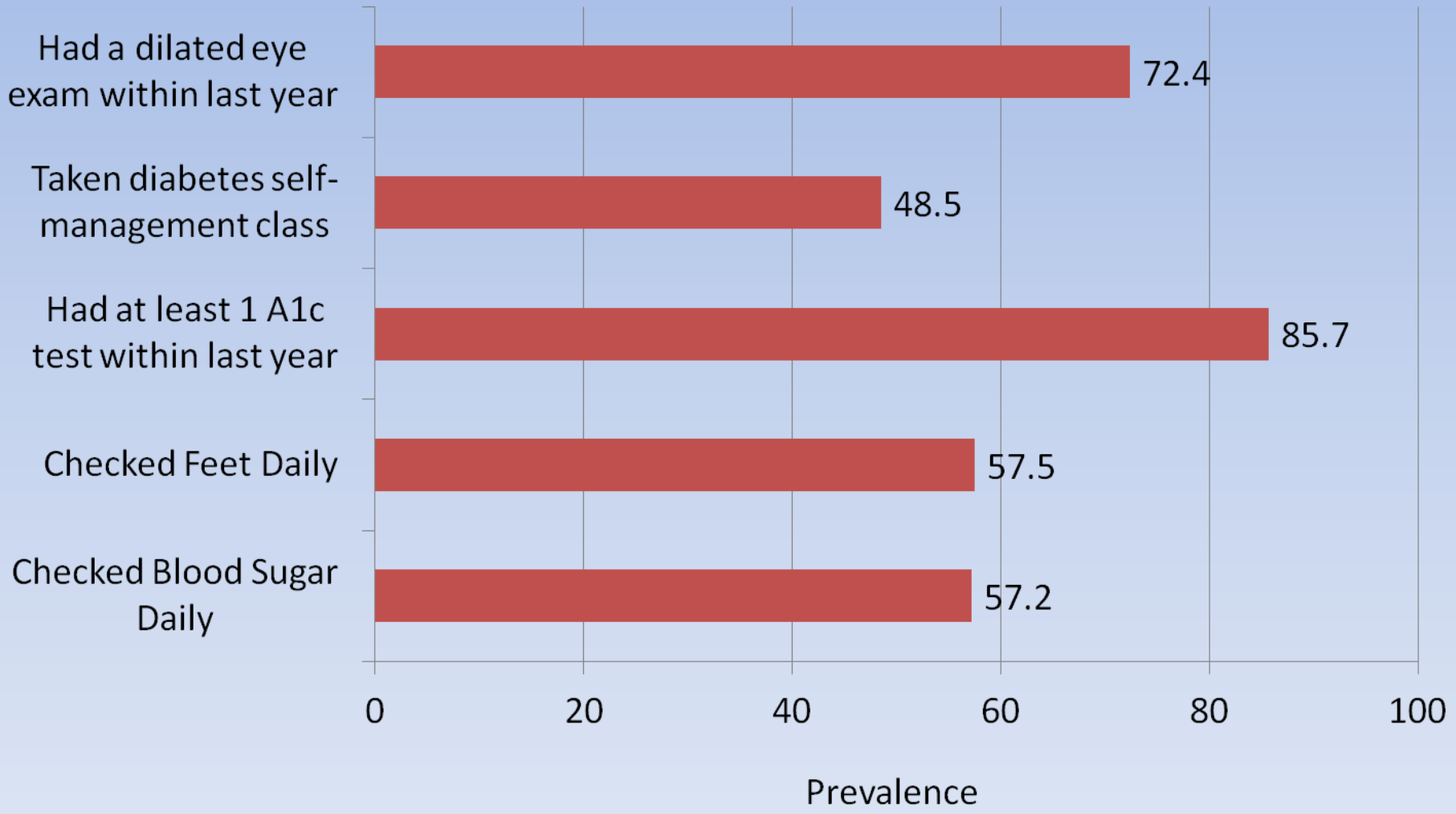
Source: The Hawaiʻi Health Data Warehouse, Hawaiʻi State Department of Health, Behavioral Risk Factor Surveillance System

Diabetes Age-Adjusted Mortality Rates per 100,000 by Ethnicity, Hawaiʻi 2004-2006



Note: Age-adjusted to the 2000 U.S. Standard Population
Source: Hawaiʻi State Department of Health, Office of Health Status Monitoring

Prevalence of Preventive Care Practices Among Adults with Diabetes, Hawai'i 2010



Source: Hawai'i State Department of Health, Behavioral Risk Factor Surveillance System

Hawaiʻi Healthy Aging Partnership

HHAP

Established 2003
Led by EOA & DOH
Now 64+ partners

- KKV
- UH
- DOH

- Recruit for and Implement DSMP Classes
- Collect Data: Clinical and Self-Reported
- Implement Evaluation Plan
- Data Analysis and Reporting
- Provide Funding
- Provide Oversight

Our pilot project goal

- To improve self-management behaviors and clinical measures among people with diabetes by providing Stanford's Diabetes Self-Management Program

This project will:

- Serve people with type 2 diabetes
- Reach 100 people
- Measure clinical outcome
- Offer DSMP

Stanford's Diabetes Self-Management Program (DSMP)
Program Overview

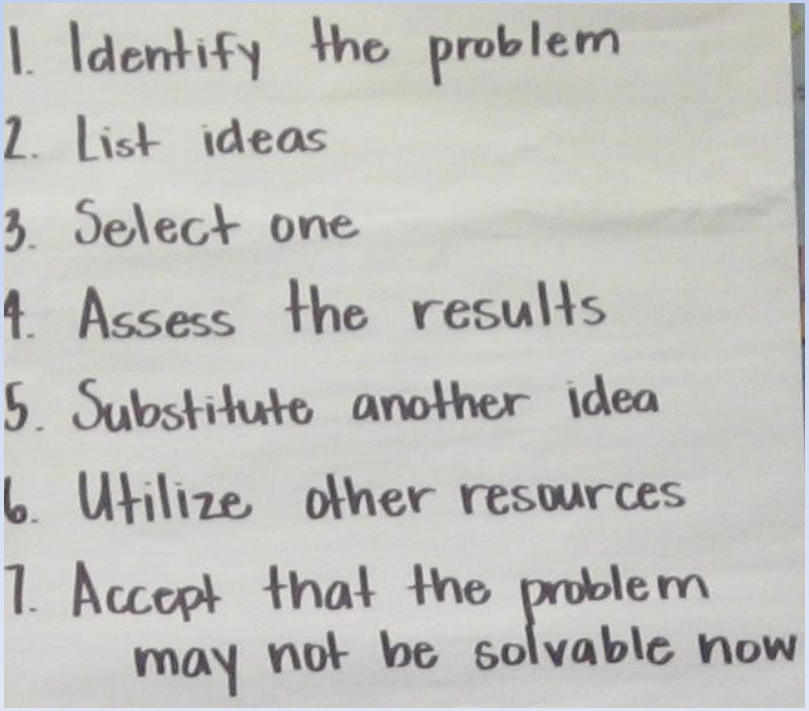
- Developed by Stanford University Patient Education Research Center
- Purpose
  - To empower people with type 2 diabetes to take control of their diabetes
  - To gain knowledge of self-management
  - To improve skills needed in the day-to-day management of diabetes

DSMP Sessions

- Educational style
  - Lead by two trained leaders
  - 2 ½ hours, once a week for 6 weeks

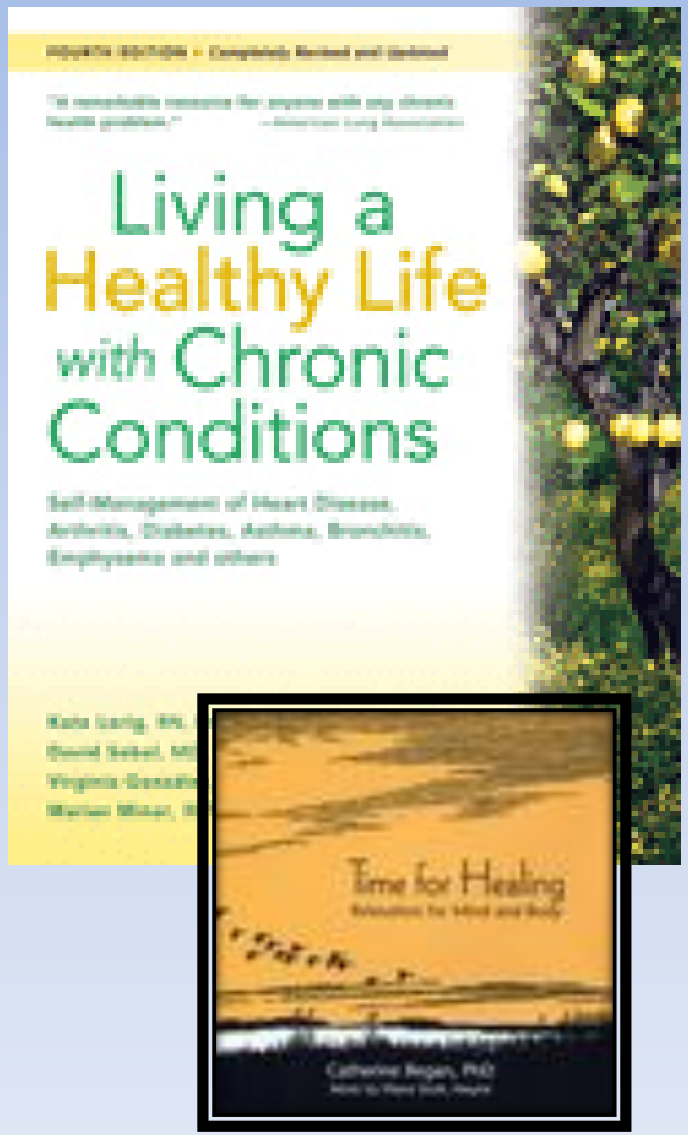
DSMP Sessions

- Feedback/ Problem solving
  - Group support
  - Building self-efficacy
- Short lecture
  - Variety of topics
  - Brainstorming
  - Problem solving
- Action planning
- Closing



Topics covered

- Understanding diabetes
- Keeping track of blood sugar
- Eating a healthy diet
- Being more physically active
- Coping with stress
- Dealing with sick days
- Taking care of your skin and feet
- Talking with health professionals
- Setting and reaching goals



Implementation Process

Recruit participants

Offer informational session

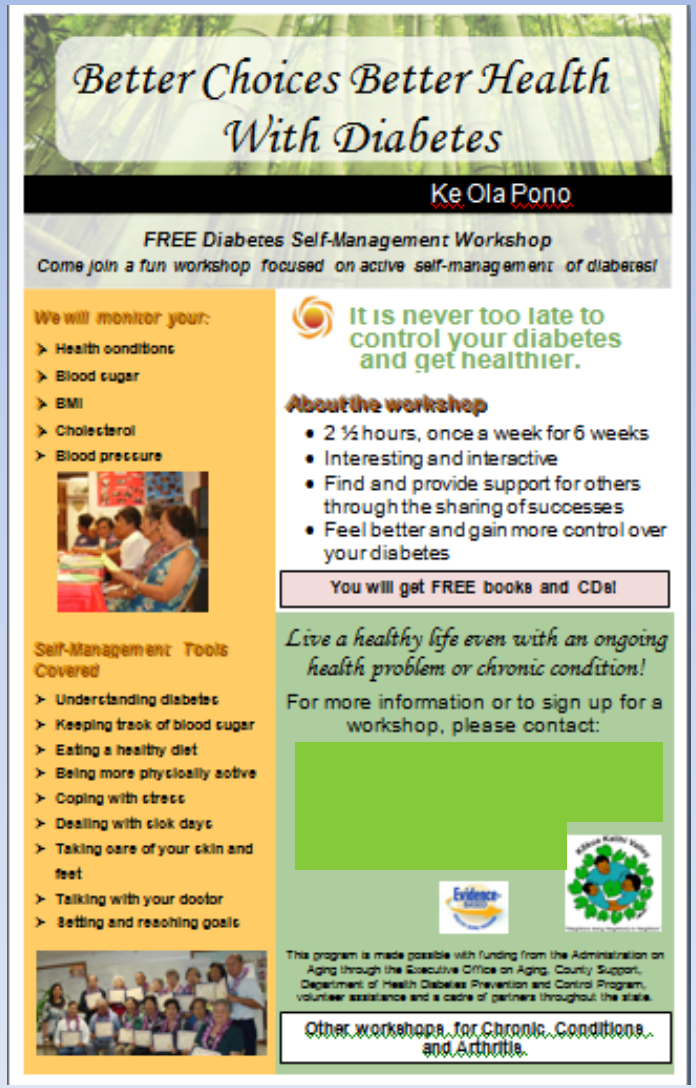
Conduct baseline data collection day

Offer DSMP workshop

Conduct 6-month reunion

Step 1: Recruit participants

- Posted flyer at
  - KKV Elder Service site
  - KKV main clinic
- Word-of-mouth
- Attended variety of community events
  - Health fairs
  - Neighborhood events



Step 2: Offer Informational Session

- Have a doctor explain the importance of diabetes self-management
- Invite leaders to the session
- Share the materials used in the class

Step 3: Conduct baseline data collection day

- Self-reported data
  - Helped to complete evaluation forms

- Clinical measures
  - Assigned 5-6 participants each day over the 2 weeks
  - Reminded to “fast”

Participants enjoyed the clinical measure assessment

Weight
Height
BMI

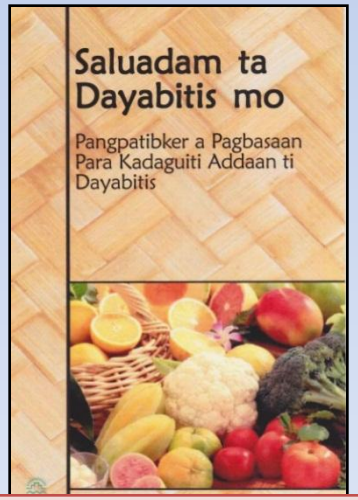
Blood Pressure

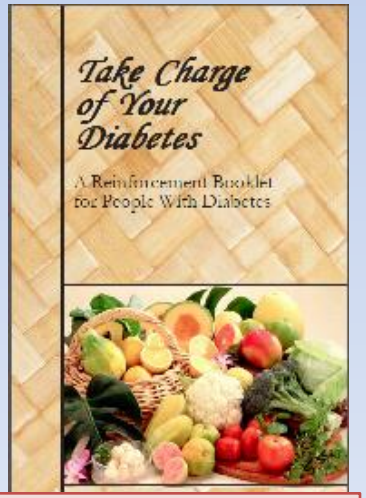
Finger prick @ site:

- Total cholesterol
- LDL
- HDL
- Triglycerides
- Fasting blood glucose
- A1c

Step 4: Offer DSMP workshops

- Used client's first language during the break & before/after the class to support understanding of the content
- Offered educational materials after the workshop
- Provided culturally appropriate healthy local-style snacks.
  - Showed healthy snacks for diabetic people



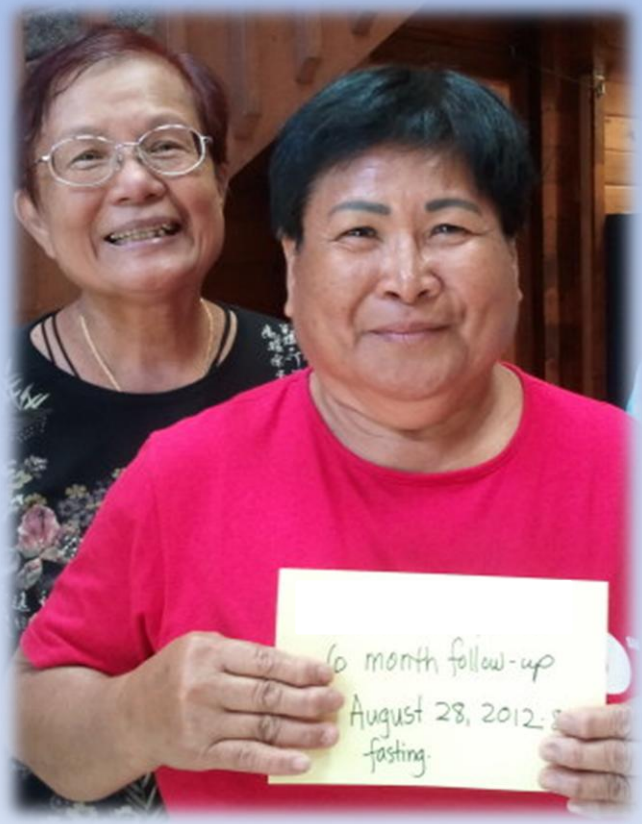


Supplemental booklet in their native language (Hawaiian, Ilocano, Chinese, etc)

Step 4: Offer DSMP workshops

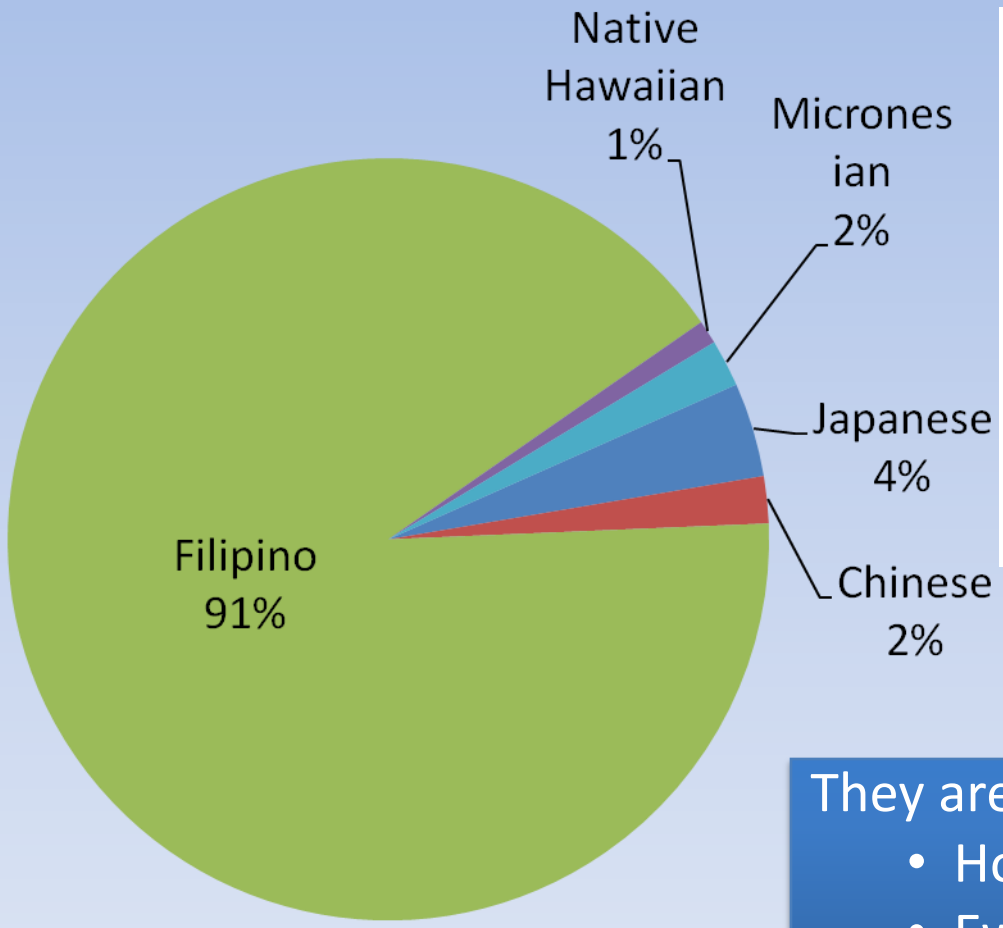
- Had graduation ceremony at the end of the last session
- Offered “Certificate of Completion“

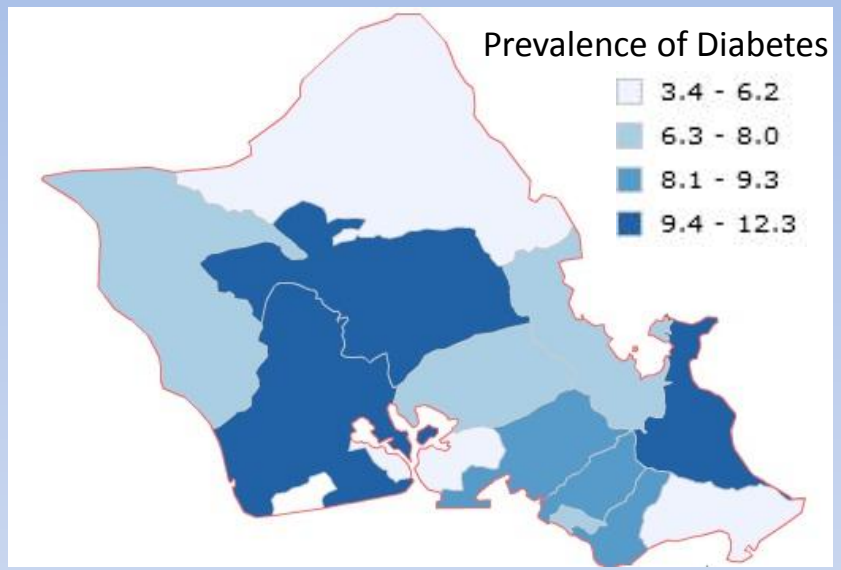
Step 5: Conduct 6-month reunion



- Assigned 5-6 participants each day to collect clinical measures over 2 weeks

101 participants completed the DSMP



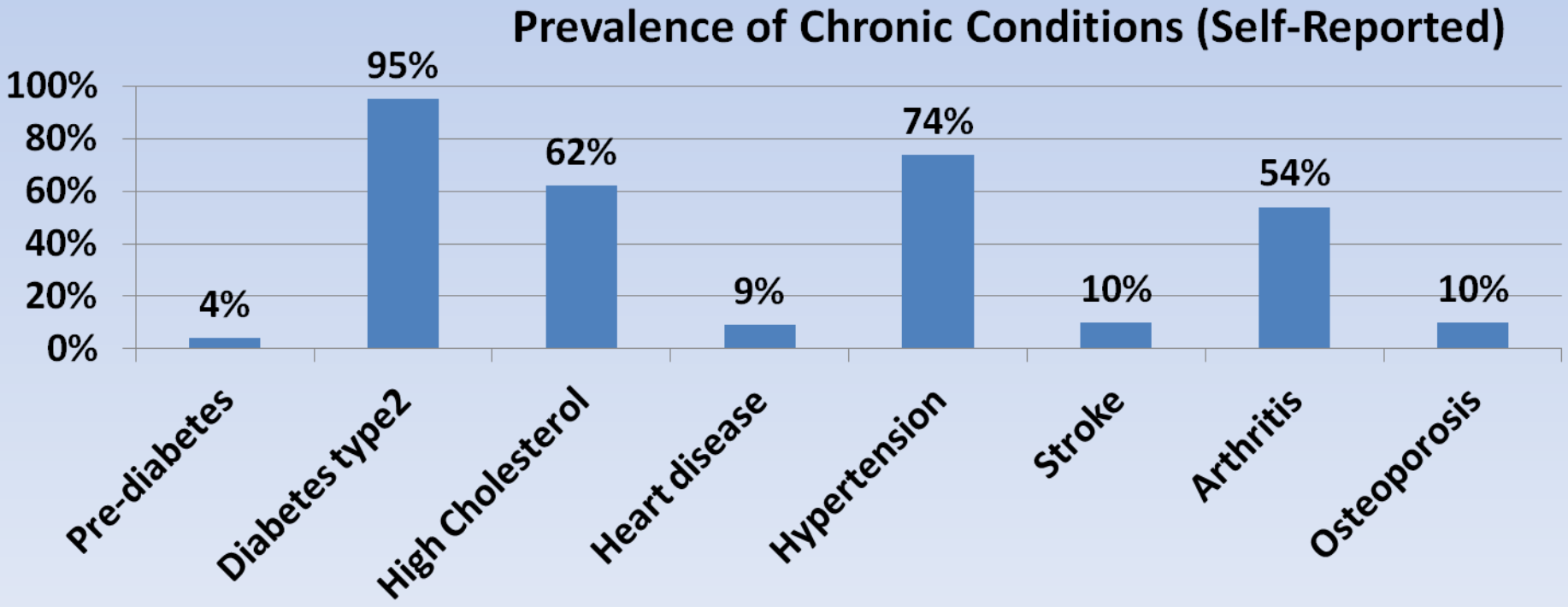


They are from:

- Honolulu (92%)
- Ewa Beach (4%)
- Waipahu (4%)

Participant Demographics

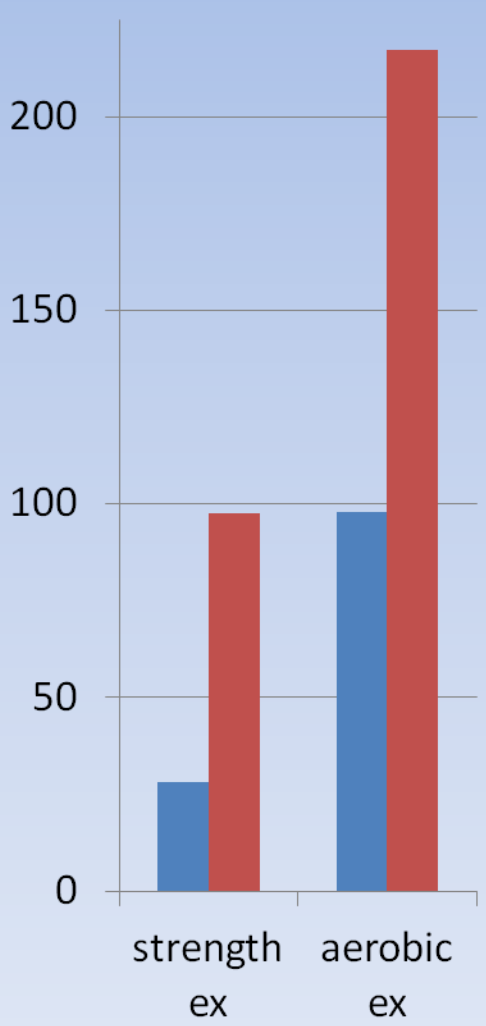
- Mean age: 73 years old
- Gender: 87% Female
- English limitation: 68%
- Completion rate: 100%



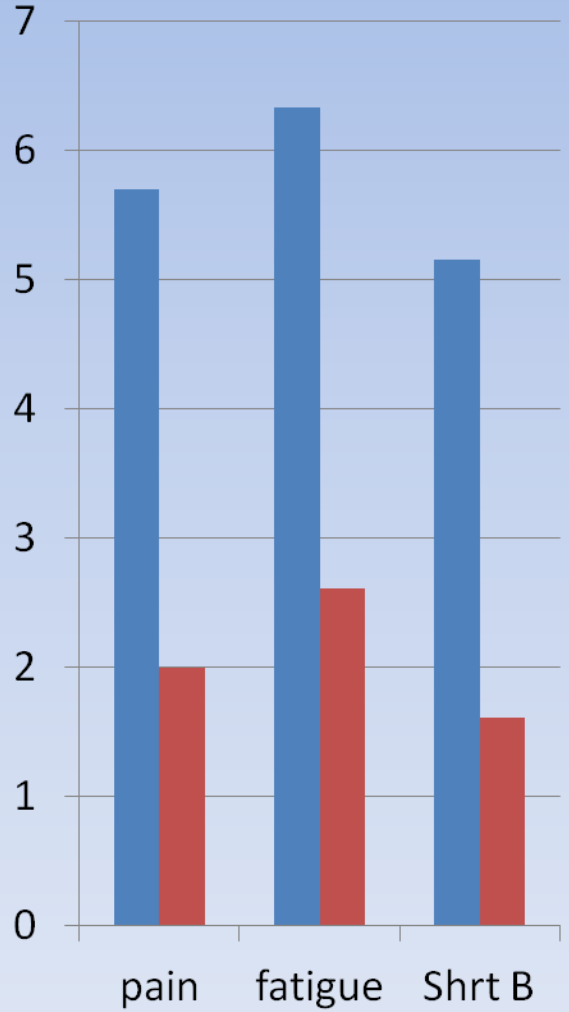
Preliminary

Reporting more exercise, fewer symptoms, and higher self-efficacy

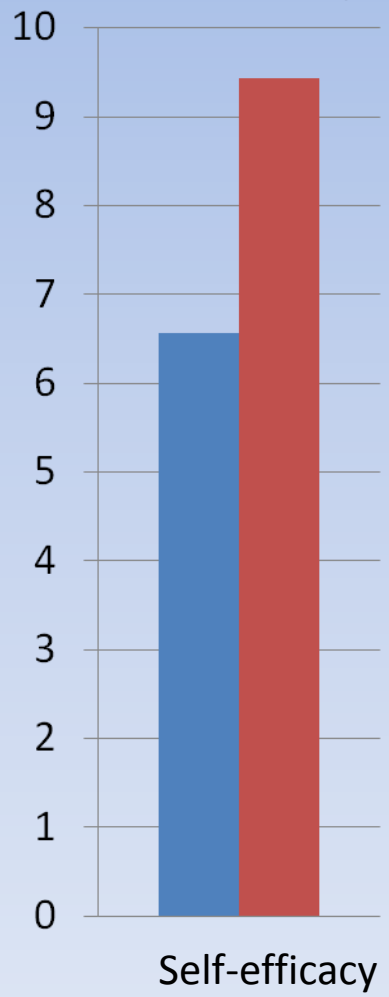
(n=33 at 6-month post-program follow-up)



Minutes per week



Scored 1-10; a higher score is worse



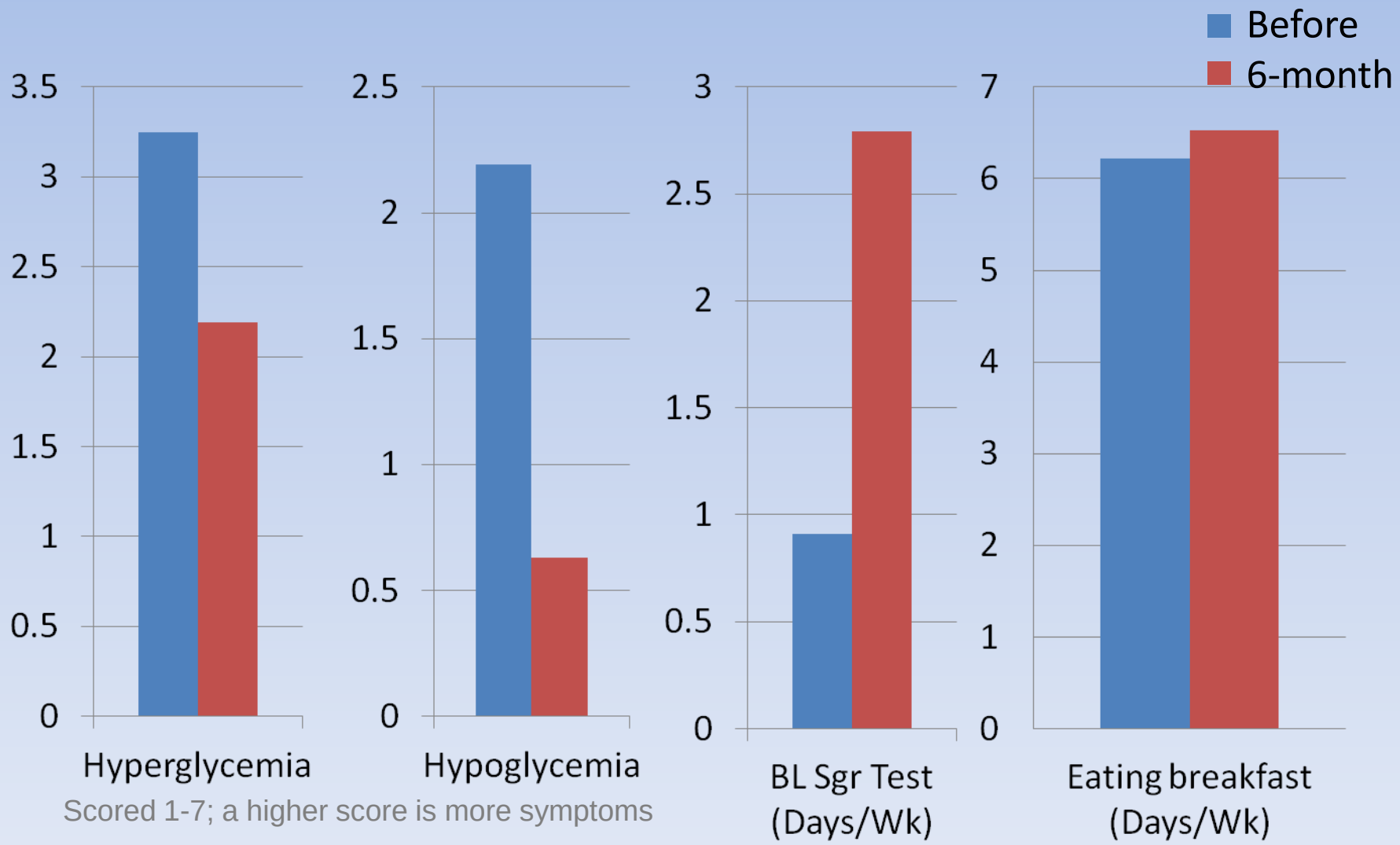
Scored 1-10; a higher score is higher self-efficacy

Before

6-month

Preliminary

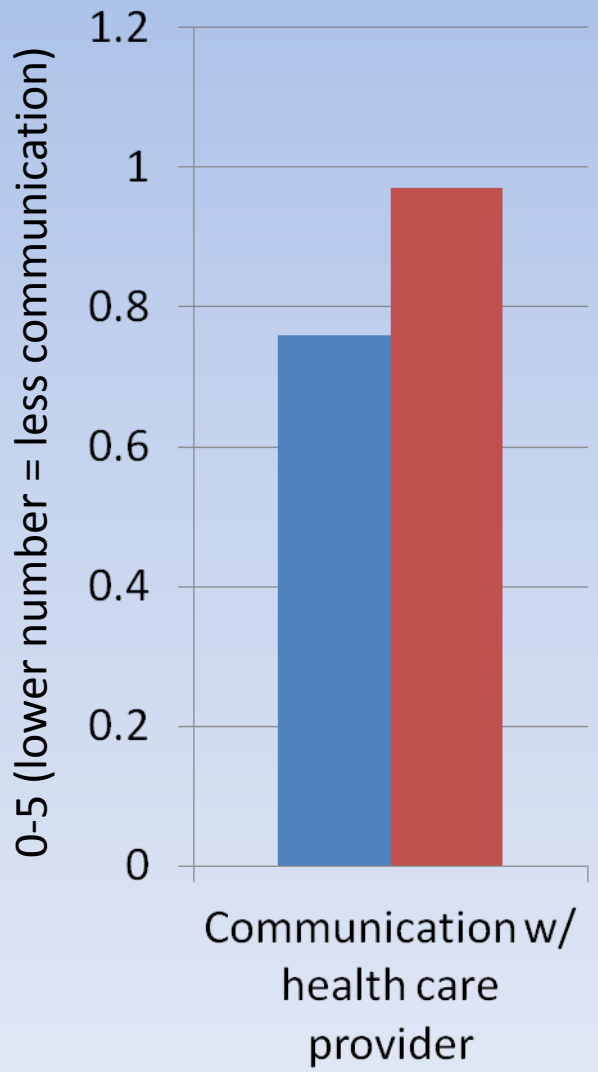
Reporting less hyperglycemia & hypoglycemia symptoms, and ↑days of blood sugar test and eating breakfast

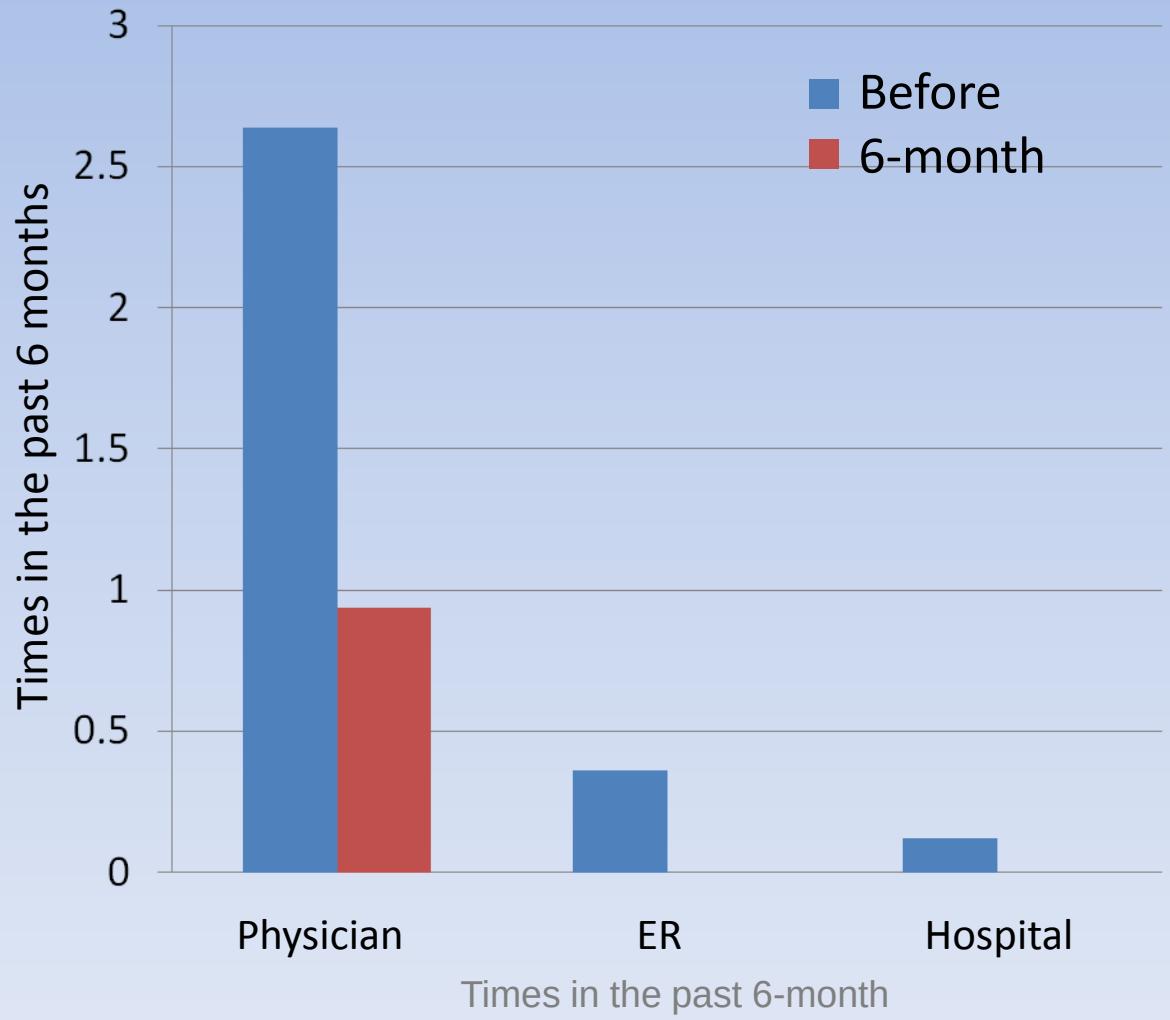


Scored 1-7; a higher score is more symptoms

Preliminary

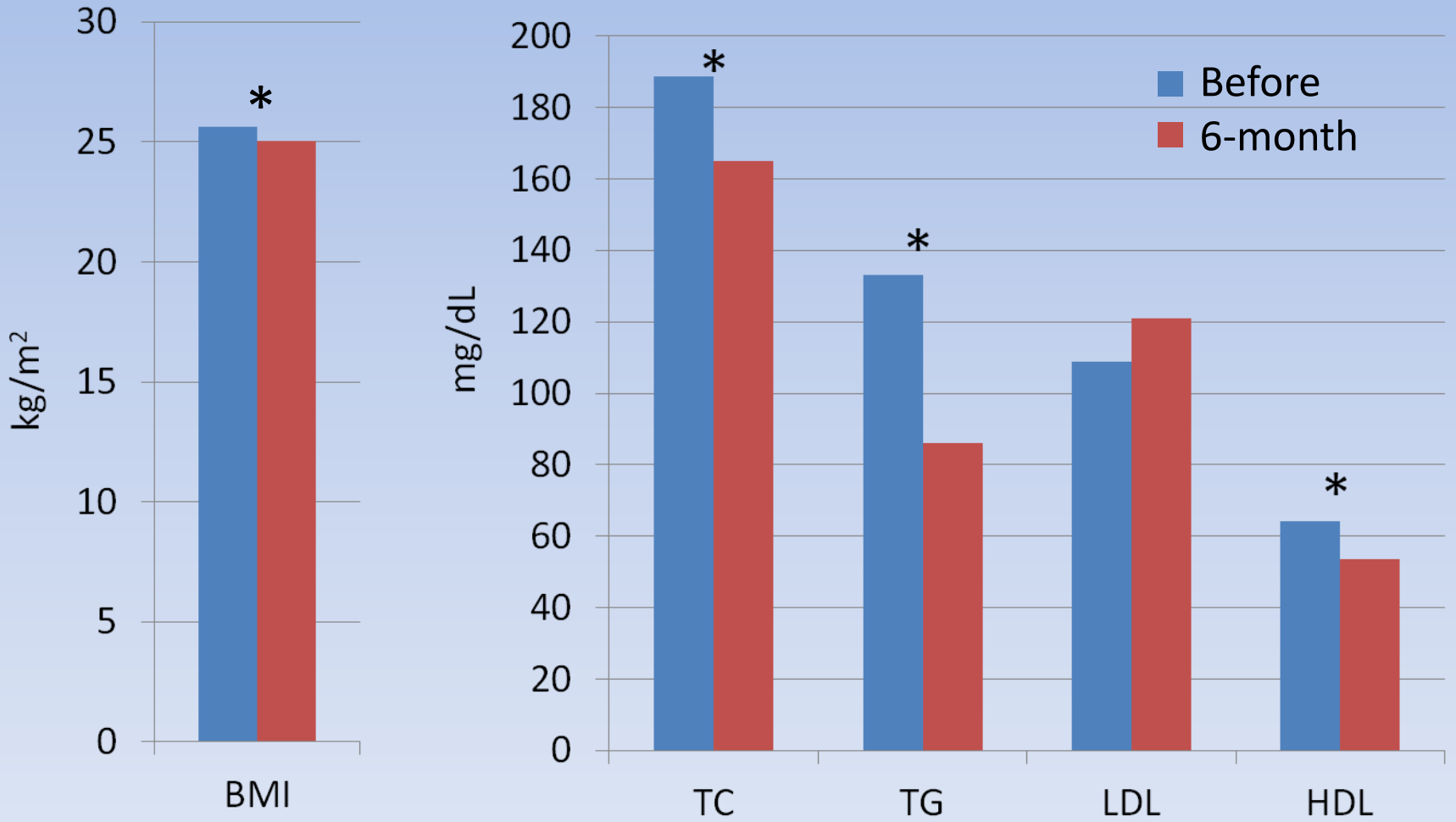
Reporting communication skills↑ and ↓medical services





Preliminary

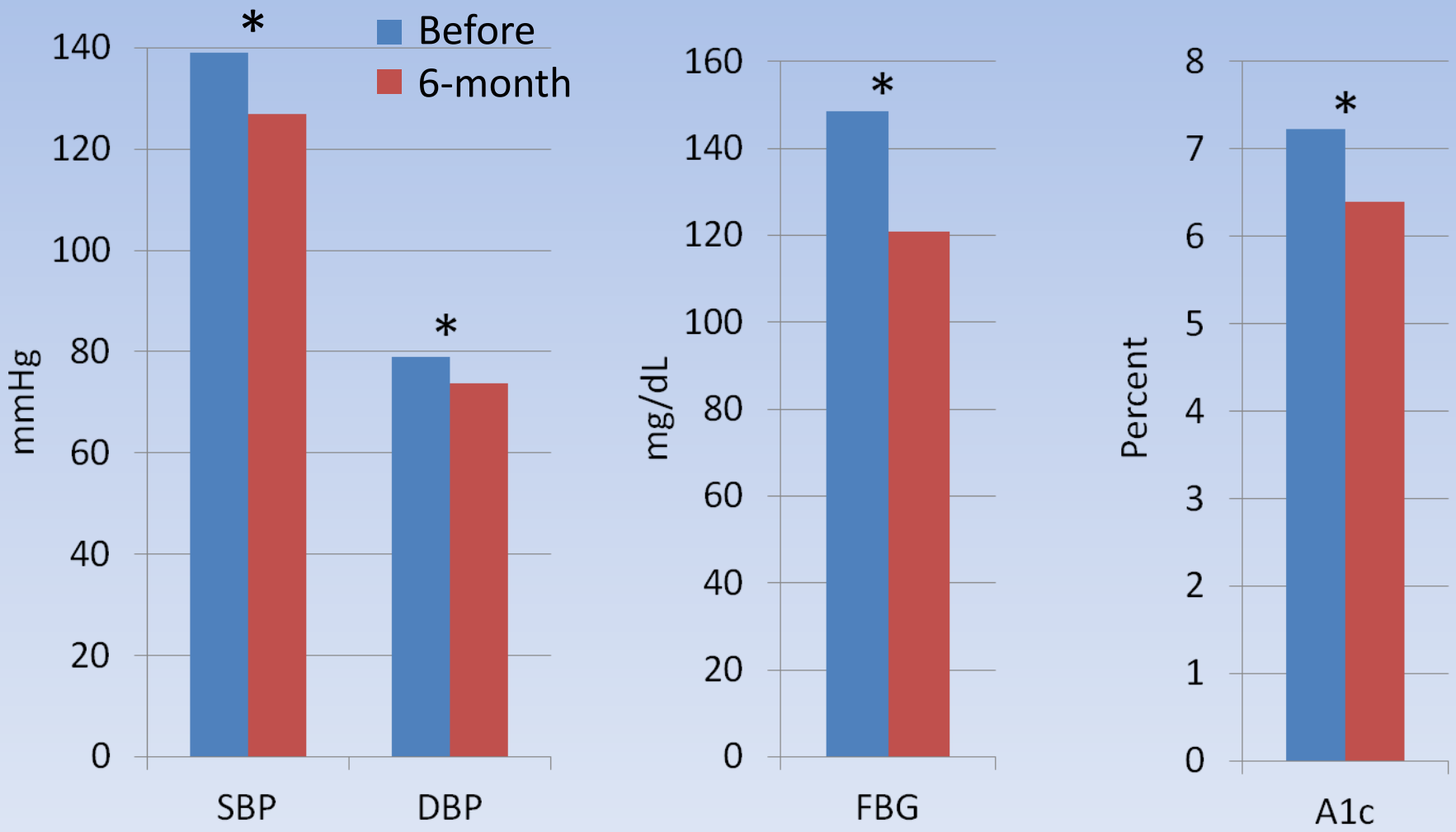
Average ↓BMI, ↓ Total cholesterol, ↓ Triglyceride, ↓ HDL, ↑ LDL



* = paired t-test $p < 0.05$

Preliminary

Average ↓ blood pressure, ↓ fasting blood glucose, ↓ A1c



* = paired t-test $p < 0.05$

Summary

- DSMP improved health behaviors and clinical outcomes among people with diabetes
- Collaborative partnership enabled collecting clinical measures and delivering one of the promising practices of diabetes self-management

Contact Information

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