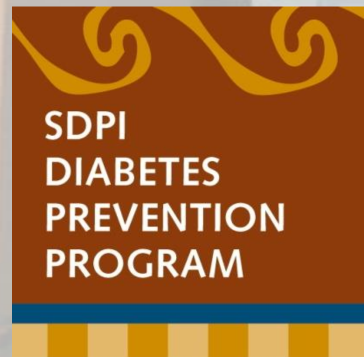
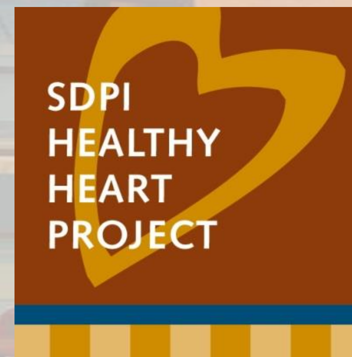
SPECIAL DIABETES PROGRAM FOR INDIANS

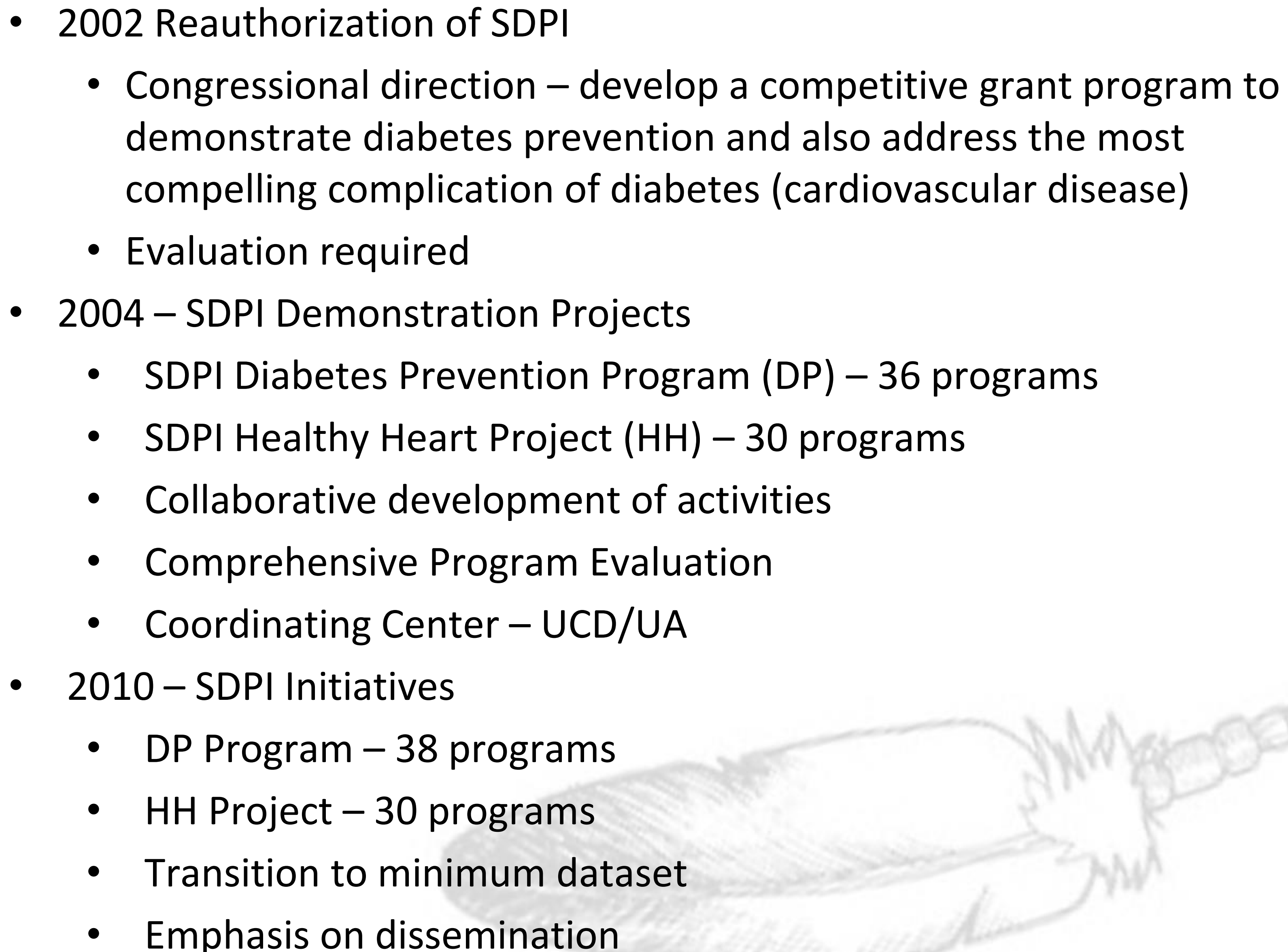
Successes & Lessons Learned from the Diabetes Prevention Program & Health Heart Project





Jenn Russell, MHA
SDPI Initiatives Coordinating Center
Centers for American Indian and Alaska Native Health
University of Colorado – Denver, Anschutz Medical Campus

- **Overview**
  - Background
  - Implementation
  - Evaluation
  - Successes and Outcomes
  - Lessons Learned
  - Local-Level Successes



- **SDPI: Diabetes Prevention Program & Healthy Heart Project**
  - 2002 Reauthorization of SDPI
    - Congressional direction – develop a competitive grant program to demonstrate diabetes prevention and also address the most compelling complication of diabetes (cardiovascular disease)
    - Evaluation required
  - 2004 – SDPI Demonstration Projects
    - SDPI Diabetes Prevention Program (DP) – 36 programs
    - SDPI Healthy Heart Project (HH) – 30 programs
    - Collaborative development of activities
    - Comprehensive Program Evaluation
    - Coordinating Center – UCD/UA
  - 2010 – SDPI Initiatives
    - DP Program – 38 programs
    - HH Project – 30 programs
    - Transition to minimum dataset
    - Emphasis on dissemination

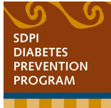
IHS SDPI Diabetes Prevention Program & Healthy Heart Project Initiative Sites

DP Site

HH Site

Coordinating Center

IHS DDTP



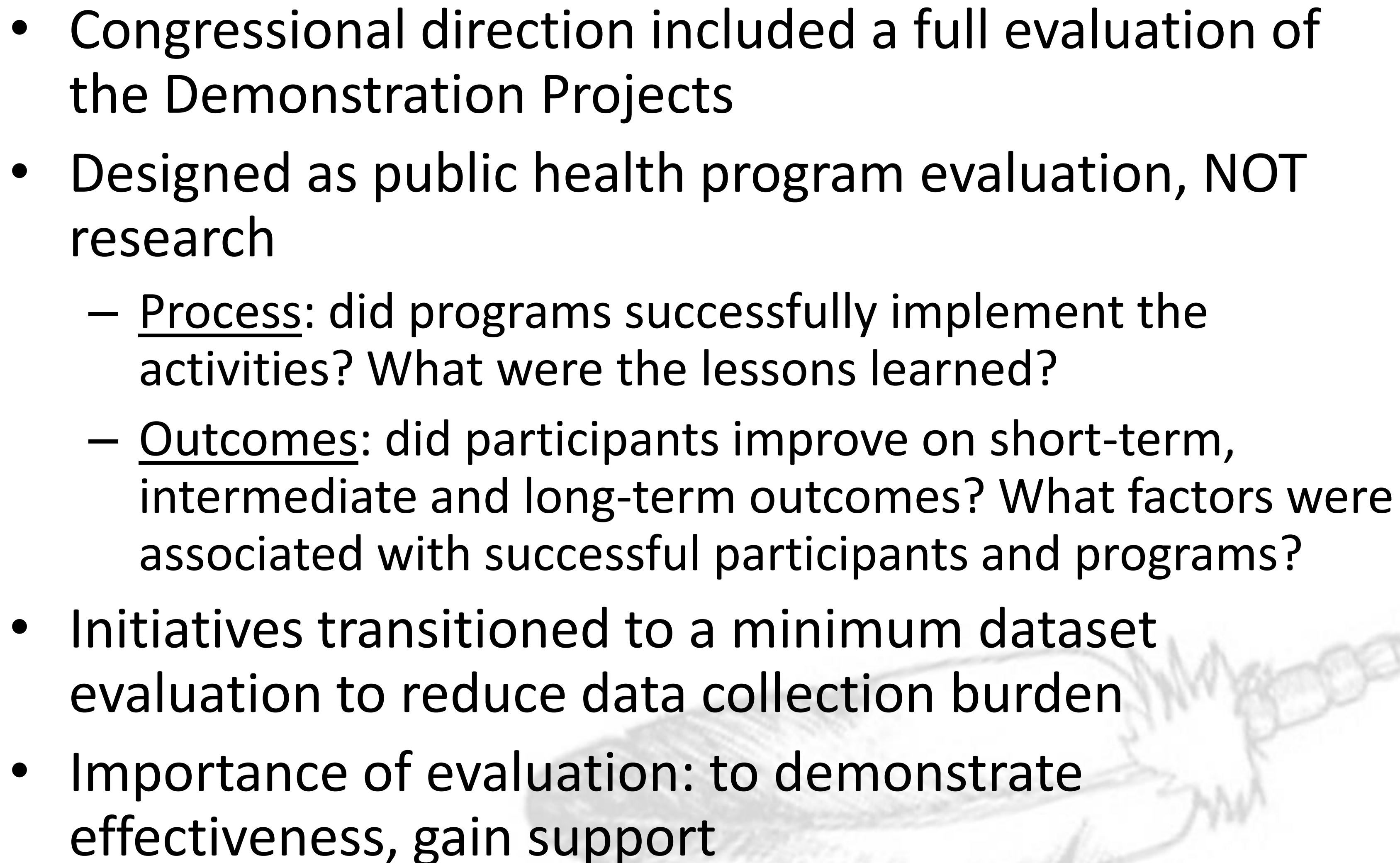
Diabetes Prevention Program

- Core Elements
  - Screen for prediabetes and recruit eligible individuals
  - Goal: enroll 48 people per year
  - Teach 16-session DPP/NLB curriculum in group settings
  - Individual lifestyle coaching
  - Retention/After Core
  - Community activities
  - Goals: prevention of diabetes, weight loss, lifestyle changes, improved health outcomes

Healthy Heart Project

- Core Elements
  - Screen to find people with diabetes and recruit eligible individuals
  - Goal: enroll 50 people per year
  - Intervention: intensive case management
  - Treat CVD risk factors to target goals
  - Provide education on CVD risk reduction
  - Retention
  - Community activities
  - Goals: improvement in CVD risk factors, CVD prevention

Evaluation



- Congressional direction included a full evaluation of the Demonstration Projects
- Designed as public health program evaluation, NOT research
  - <u>Process</u>: did programs successfully implement the activities? What were the lessons learned?
  - <u>Outcomes</u>: did participants improve on short-term, intermediate and long-term outcomes? What factors were associated with successful participants and programs?
- Initiatives transitioned to a minimum dataset evaluation to reduce data collection burden
- Importance of evaluation: to demonstrate effectiveness, gain support

Evaluation

- Measurements at **Grantee** Level
  - Provider: Demographic, Professional background
  - Program: Recruitment, Retention, Team activities
  - Organization: Organization effectiveness
  - Community: Community stakeholders' perspective
- Cost Analysis

Evaluation

- Measurements at **Participant** Level
  - Clinical History
  - Medications
  - Clinical measurements such as: weight, height, waist, BP, lipid profile, & OGTT/FBG/A1c
  - Attendance
  - Self-report survey

Evaluation

- Data Collection
  - Full Evaluation (Demo. Projects)
    - Weekly and yearly data submission – on paper, by mail!
    - SDPI Diabetes Prevention Program
      - 12 types of participant-level forms
      - 8 types of grantee-level forms
    - SDPI Healthy Heart Project
      - 8 types of participant-level forms
      - 7 types of grantee-level forms
  - Minimum Dataset (Initiatives)
    - 4 forms total
    - Web-Based Data Entry System

SDPI Assessment Timeline

Diabetes Prevention Program

Baseline Assessment

Lifestyle Balance Curriculum

Year 1 Assessment

Year 2 Assessment

Year 3 Assessment

Start Date

Post-DPP Assessment

Month 18 Mid-Year Assessment

Month 30 Mid-Year Assessment

Baseline Assessment
Complete 30 days before the Start Date

Start Date
The first day the participant attends a Lifestyle Balance Session

Lifestyle Balance Curriculum
16 sessions over a 4-6 month period

Post-DPP Assessment
Complete within one month after finishing the Lifestyle Balance Curriculum

Annual Assessment
Complete yearly within 30 days of the start date's anniversary

Mid-Year Assessment
Complete yearly within 30 days of the start date's anniversary, plus six months

SDPI Assessment Timeline

Healthy Heart Program

Start Date

Year 1 Assessment

Year 2 Assessment

Year 3 Assessment

Baseline Assessment

Case Management Visits

Baseline Assessment
Complete 30 days before the Start Date

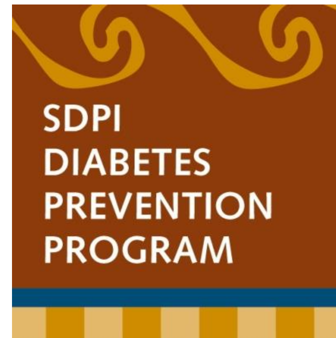
Start Date
The first Case Management Visit

Case Management Visits
Monthly or quarterly visits with a Case Manager, depending on status stabilization

Annual Assessment
Complete yearly within 30 days of the start date's anniversary

Program Successes & Outcomes

Diabetes Prevention Program



DP Recruitment

- 8495 eligible participants recruited into the SDPI Diabetes Prevention Program through March 31, 2016
- 75% female, 25% male
- Mean age 47 years (18 to 93)

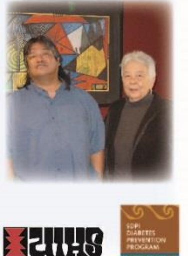
IHS Area			
Oklahoma	18%	Phoenix	7%
Bemidji	15%	Nashville	5%
Great Plains	13%	Navajo	5%
California	12%	Albuquerque	3%
Portland	11%	Billings	2%
Alaska	9%		

DP Recruitment

- Billboards
- Brochures
- Calendars
- Community Activities
- Flyers
- Letters
- News Articles
- Presentations
- **Referrals**

Diabetes is Preventable!

Eat Healthy
Be Active
Honor Culture



We're American Indians, and we have the power to prevent type 2 diabetes! Science has proven that we can prevent diabetes if we lose as little as 10 pounds by walking 30 minutes a day, 5 days a week and making healthy food choices. Find out how you can join the **Lifestyle Balance Program** at United Indian Health Services. Your Diabetes Prevention Team will teach you to lose weight through healthy eating and exercise.

For more information about diabetes prevention and the Lifestyle Balance Program, call
707-825-5070 or 1-800-675-3693

June 2011

Sun	Mon	Tue	Wed	Thu	Fri	Sat
			1 Auburn-DeWitt Farmer's Market 10:30 AM—1:30 PM 1st St & B Ave every Wed.	2	3 14th Annual Standing Bear Pow Wow at Bakersfield College, through June 5. (661) 589-3181	4 [illegible]
5	6 Drum group Sierra Native Alliance 4-6 PM Call Jason for more info: (530) 350 0847	7 White Bison Young Adults Group Sierra Native Alliance 4:30-5:30 PM (530) 350-0847	8	9 Auburn Art Walk 6 PM 885-5670	10 Cruise Night 5-9 PM on Lincoln Way— www.auburncruisenite.com	11 15th Annual San Luis Rey Pow Wow at San Luis Rey Mission through June 12. [illegible]
12	13 [illegible]	14	15 Wednesday Night [illegible] 9 PM on High St. in front of the Auburn Journal. Entertainment, food, and fun! [illegible] consecutive	16 Loomis Thursday Night Familyfest 5-9PM at the historic Train Depot parking lot. (916) [illegible]	17 Party in the Park. Free concert & Family fun event. 5 PM at Auburn Regional Park. Www.partyinthepark.net	18 12th Annual Auburn Family Night Out 5-9PM from Old Town to Down Town. 888-1585
19 [illegible]	20	21 White Bison Sierra Native Alliance 6-8PM Call Arthur Apodaca at (530) 615 6695	22 Families of Tradition Sierra Native Alliance [illegible] Call Arthur at (530) 615-6695	23 Nisenan Language w/ Alan Wallace Sierra Native Alliance 4-6 PM (530)	24 Outdoor Family Movie Night 7 PM free outdoor movie and concession stand at Sierra Pacific Real Estate in Meadow Vista (530) 878-5100	25
26 Summer Concert Series free concert at 7 PM at Auburn's Library Garden Theater 885-5670	27 Pow-Wow Drum & Dance Class Sierra Native Alliance 4-6 PM (530) 350-0847	28	29	30 North Ute 4th of July Pow Wow at FT. Duchesne Pow Wow Area (435) 722-5141		

Enroll Today to be Diabetes Free

Zuni DIPS Program is recruiting Zuni Adults 18 years of age and older who are diagnosed with "Pre-Diabetes".

Screening Process

1. Lab Appointment will be scheduled by program. Lab work includes:
   - Fasting/2 Hours Oral Glucose (OGTT)
   - Lipid Panel (Cholesterol, Triglycerides)
   - A/C Ratio (check for protein)
   - HgBA1c (measures blood sugar for the past several months)

   LABS WILL BE DONE AT IHS
2. IHS provider will review lab results and determine eligibility
3. If eligible, ECG (Electrocardiogram) will be scheduled at IHS.
4. When all the above is complete, paperwork will be administered at the DIPS Program

FOR MORE INFORMATION
Please come by the office or give us a call!!
Zuni DIPS Program
03B Route 301 North
(505) 782-3091/3095

Let's Create a Healthy Future
Prevent Diabetes
FOND DU LAC DIABETES PREVENTION PROGRAM
Min No Aya Win and CAIR
LAMAR
10x28
LAMAR
5/19/11
© THIS DESIGN WAS CREATED BY LAMAR ADVERTISING AND CANNOT BE USED FOR ANY OTHER ADVERTISING PURPOSES WITH OUT WRITTEN PERMISSION.

WHAT WILL I RECEIVE IF I JOIN?

Not only will you enjoy a healthier, energetic lifestyle, you will receive the following tools for success to assist you in the program:

- Nike N-7 Shoes
- Nike Exercise Bag
- Food Scale
- Weight Scale
- Small exercise equipment to assist in keeping active.
- Nike Socks
- Nike Water Bottle
- A Chance to win other prizes as well!

Let us help you work towards preventing Diabetes!

Working together to Prevent Diabetes

Benewah Medical / Wellness Center
Native Lifestyle Balance Program
P.O.B. 388 – 1115 B. Street,
Plummer, ID 83851

Call Mel to be screened
Phone: 208-686-1931
Fax: 208-686-8052
www.cdatribalwellness.org

Benewah Medical / Wellness Center
Coeur d'Alene Tribe

NATIVE LIFESTYLE BALANCE PROGRAM

Diabetes Prevention Program

WHAT IS THE NATIVE LIFESTYLE BALANCE PROGRAM?

16 weeks of fun and interactive classes or one-on-one coaching which include topics on nutrition, physical activity, problem solving, motivation, group support, and stress management. The program will provide participants with the opportunity to learn healthier nutrition options and the importance of moderate physical activity.

After completing the 16-week program we will continue to support your new lifestyle. We offer monthly after core meetings with education, healthy meals, physical activity and group support. We also continue with individual lifestyle balance coaching.

WHY IS THE NATIVE LIFESTYLE BALANCE PROGRAM IMPORTANT?

- Staff will assist you in taking steps to reduce risk and/or prevent Diabetes.
- Previous research has shown moderate increase in physical activity and a 7% weight loss can decrease your risk of diabetes.
- Participants who made lifestyle changes reduced their risk of getting type II diabetes by 58 %.
- Improving your lifestyle and nutrition increases your sense of well being, reduces stress, improves energy.
- May contribute to reduction of other health risks that can lead to heart disease.
- Participation in the program gives you tools to become in charge of improving your health and the health of your loved ones.

WHAT ARE THE RISK FACTORS FOR DIABETES?

- Native American Heritage
- Age greater than 45 years
- Diabetes during a previous pregnancy
- Excess body weight (especially around the waist)
- Family history of diabetes
- Given birth to a baby weighing more than 9 pounds
- HDL cholesterol under 35
- High blood levels of triglycerides, a type of fat molecule (250 mg/dL or more)
- High blood pressure (greater than or equal to 130/80 mmHg)
- Impaired glucose tolerance
- Low physical activity level
- Poor Nutrition

PROGRAM ELIGIBILITY REQUIREMENTS

- Enrolled Native American with a Federally recognized tribe
- BMC Patient
- 18 years old or older
- Be willing to screen for Diabetes

REFERRAL FORM

NACA FHC/Health Promotion Program
1500 E. Cedar Avenue, Suite 26, Flagstaff, Arizona 86004
Phone# (928) 773-1245, Ext. 32 Fax# (928) 773-9429

Patient Name: ____________ **DOB:** ________ **Phone :** ________

☐ **Patient consents to be contacted by NACA Health Promotion Office**

Provide most recent laboratory and assessments to NACA Health Promotion Program
Or Attach most recent laboratory test results

Recent Lab Date: ______		**Vitals and Assessment: Date:** ______
A1C: ______	LDL: ______	BP: ______
Fasting BS: ______	VLDL: ______	HT: ______
GFR: ______	Triglyceride: ______	WT: ______
Total Cholesterol: ______	Microalbumin: ______	BMI: ______
HDL: ______		Waist Circumference: ______

Referring Provider to check appropriate box below

☐ **Diabetes Prevention Program:** Date of PreDM Diagnosis: ________ (requires PreDm Diagnosis)

☐ **Diabetes Self Management Education Program:** Date/Year of Diagnosis: ________
(Individual appointments, support group and classes available)

☐ **Cardiovascular Disease Prevention Program**
(Open to anyone)

☐ **Healthy Living Classes**
(Wellness and adult weight management classes open to anyone)

☐ **Registered Dietitian** *(by individual appointment only)*

☐ **NACA Wellness Center** *(NACA Medical clearance form from NACA must be completed)*
Individual assessments and prescribed sessions available. Group Fitness Classes available

Provider Notes: *(restrictions, medications, other recommendations)*

Referring Provider: ____________ Date: ________
Referring Facility: (Please check below)
____ Sacred Peaks Health Center
____ NACA Health Center
____ Other Facility: ____________
Facility Phone Number: ____________

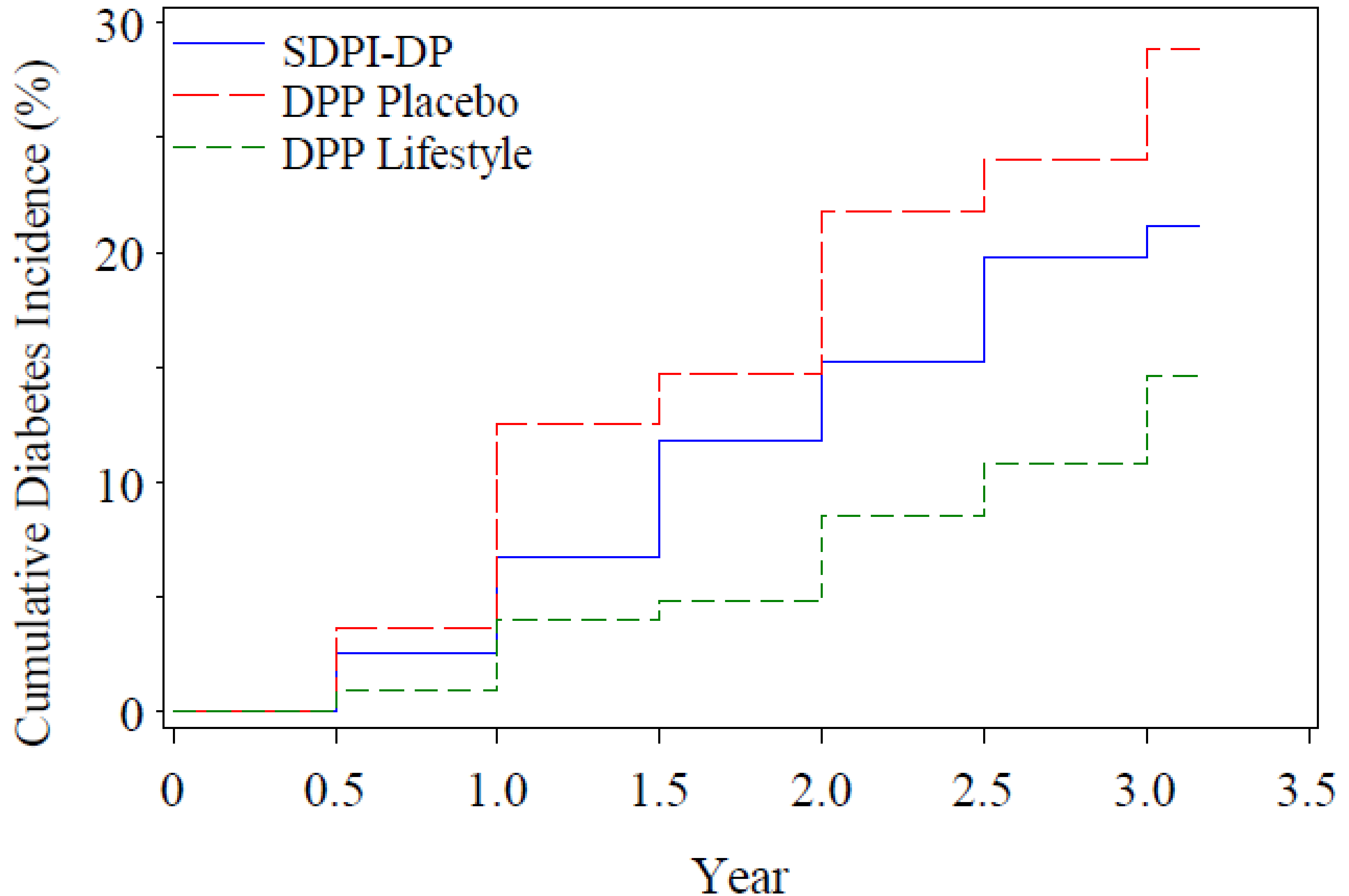
NACA Health Promotion Program
August 2011

DP Outcomes

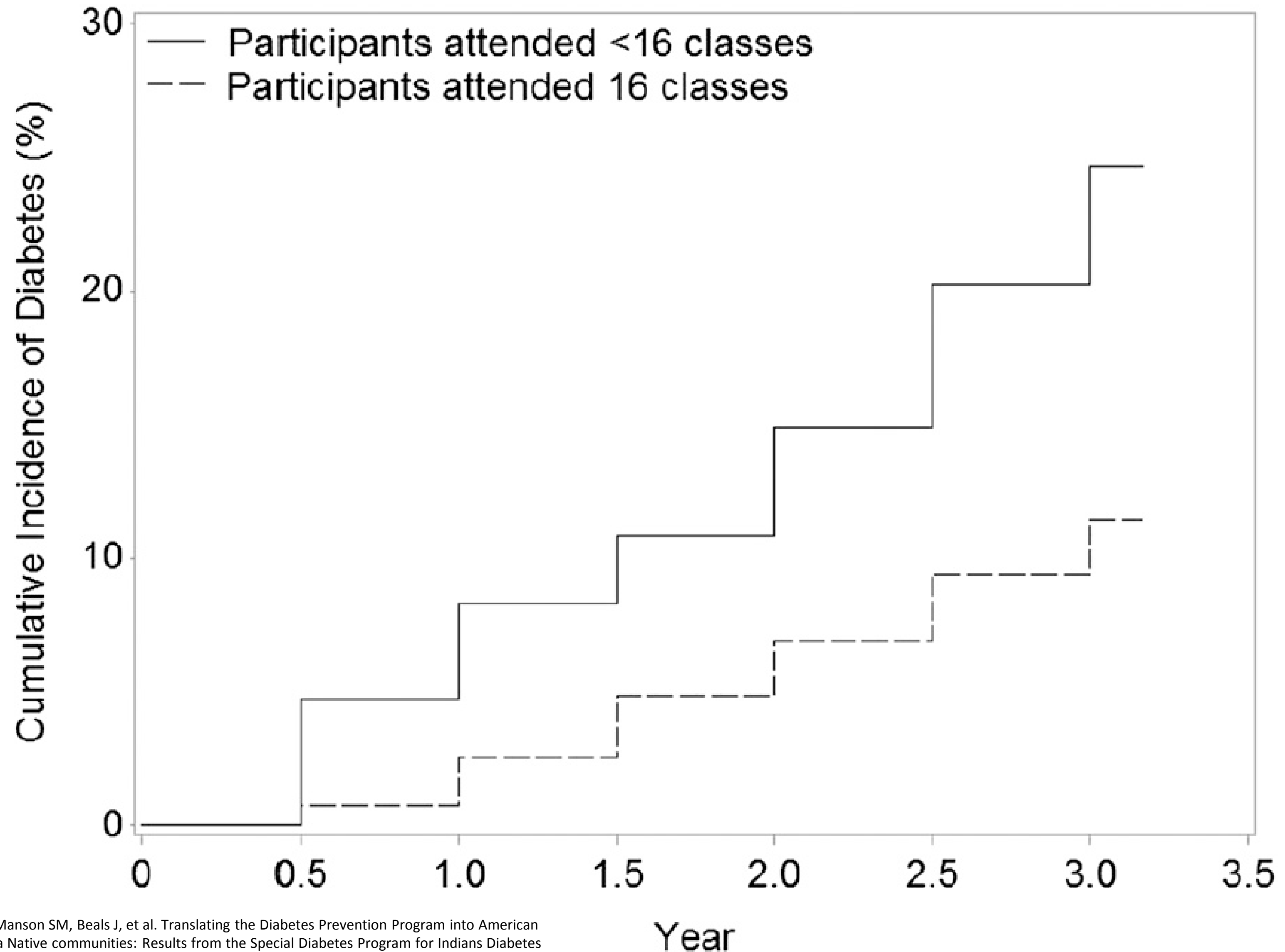
- Weight Loss
- Improved Lipids
- Increased Physical Activity
- Increased Consumption of Healthy Foods
- Decreased Consumption of Unhealthy Foods

*Outcomes presented on 3314 participants who enrolled during the full evaluation phase

Cumulative Incidence of Diabetes in NIH DPP and SDPI-DP participants meeting NIH criteria (N = 648)

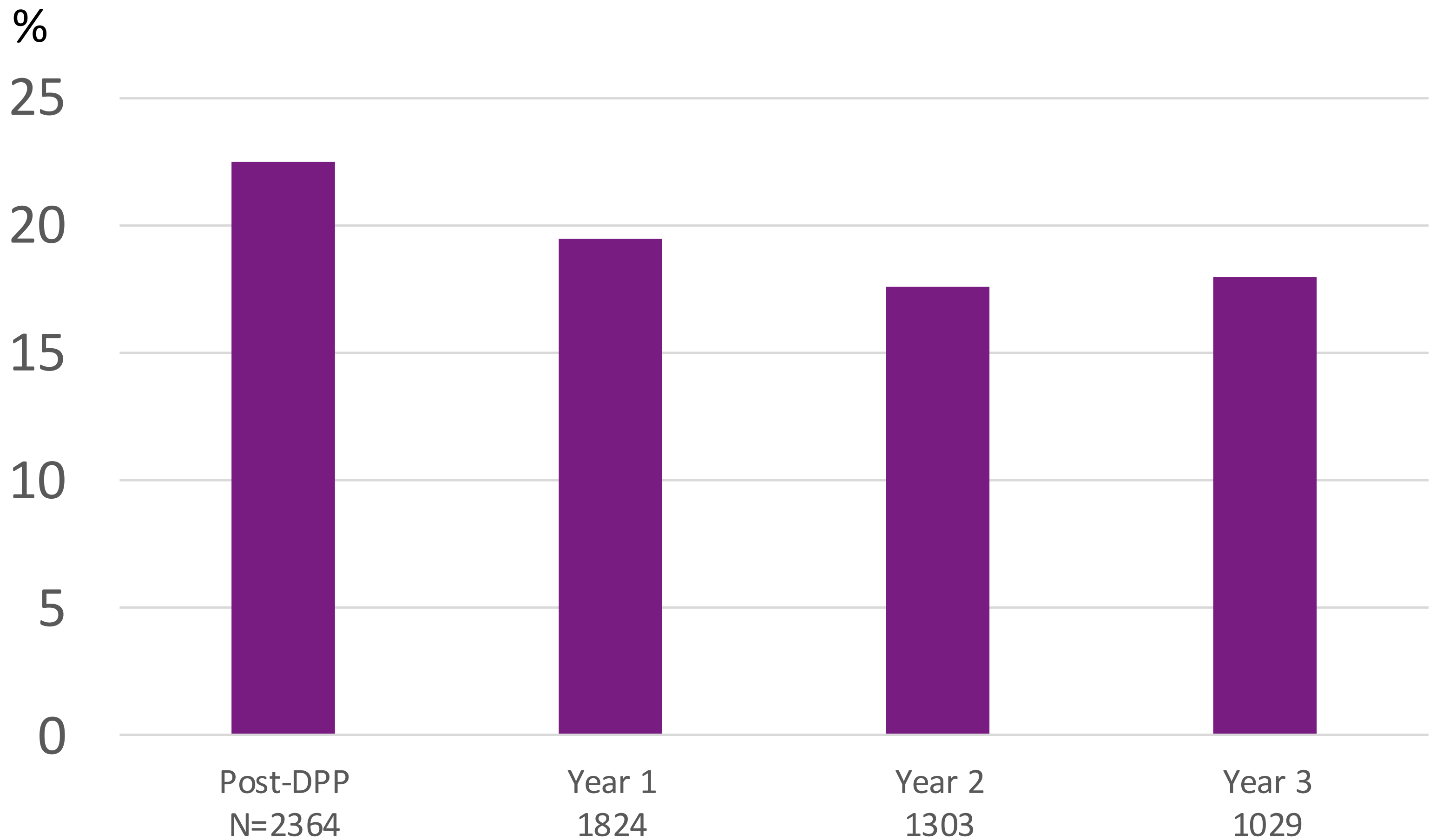


Cumulative Incidence of Diabetes by DPP Class Attendance



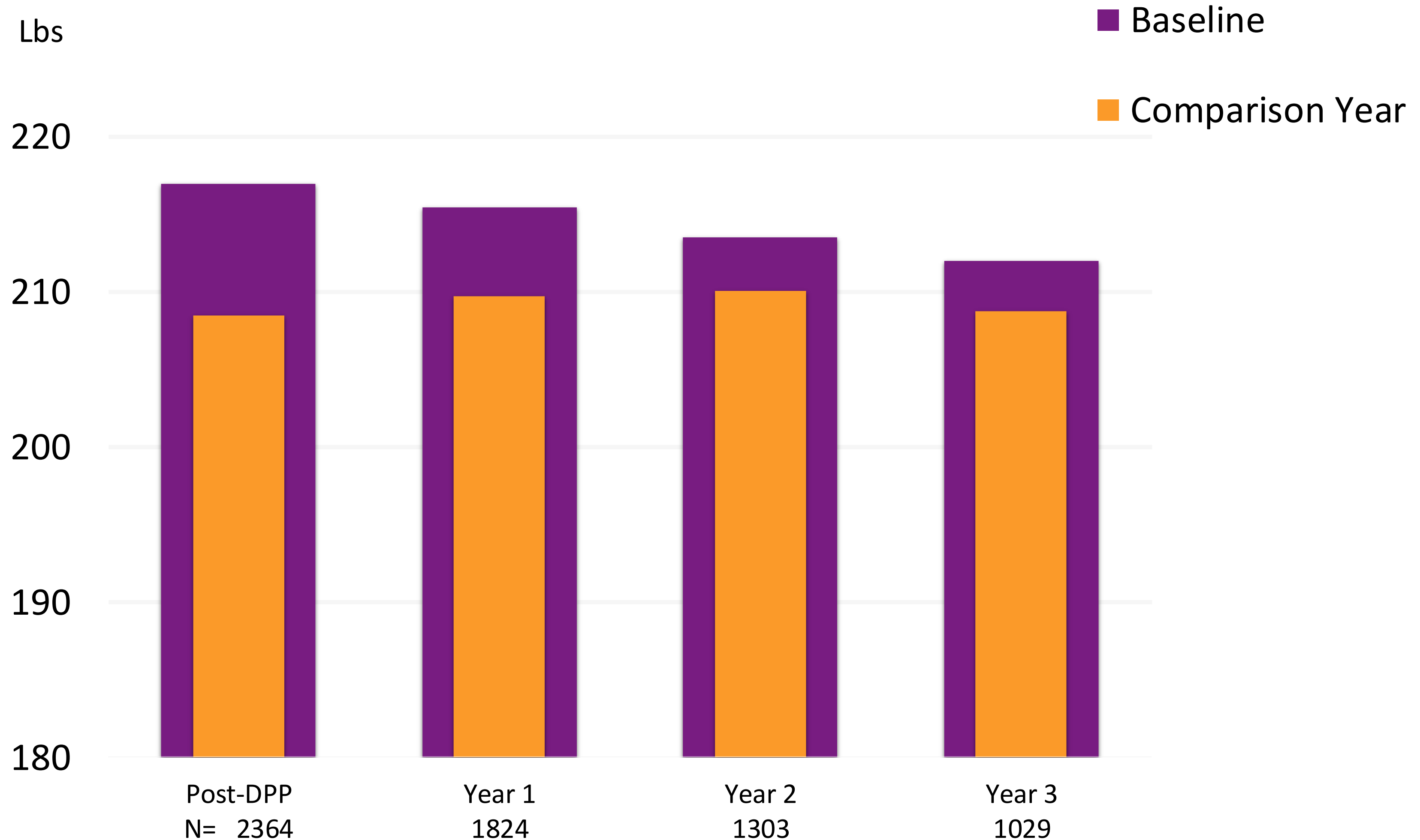
Source: Jiang L, Manson SM, Beals J, et al. Translating the Diabetes Prevention Program into American Indian and Alaska Native communities: Results from the Special Diabetes Program for Indians Diabetes Prevention demonstration project. Diabetes Care. 2013;36:2027–2034.

DP Outcomes



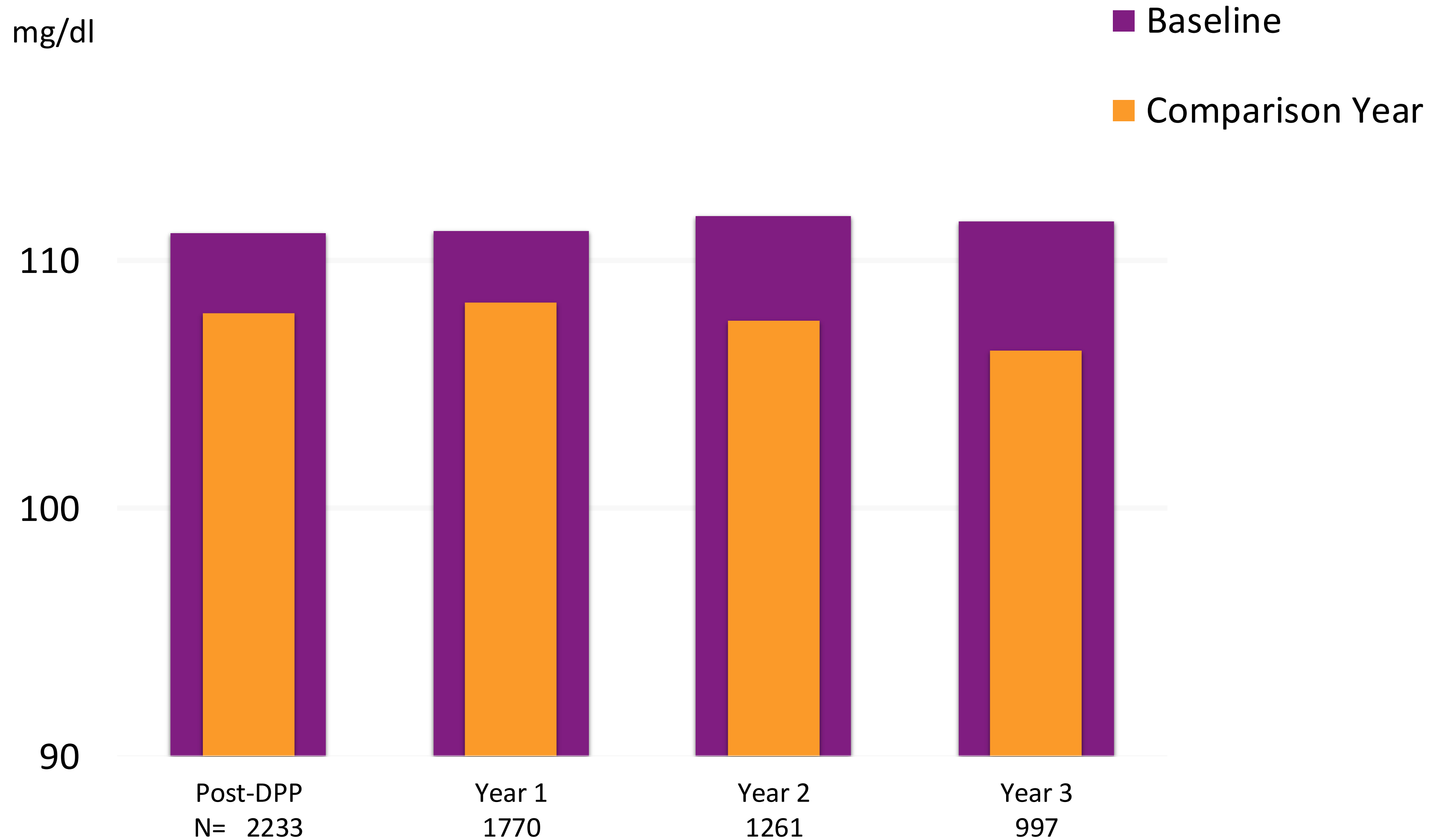
DP: Mean Weight

Pairwise Comparisons between Baseline (Start) and Each Program Year



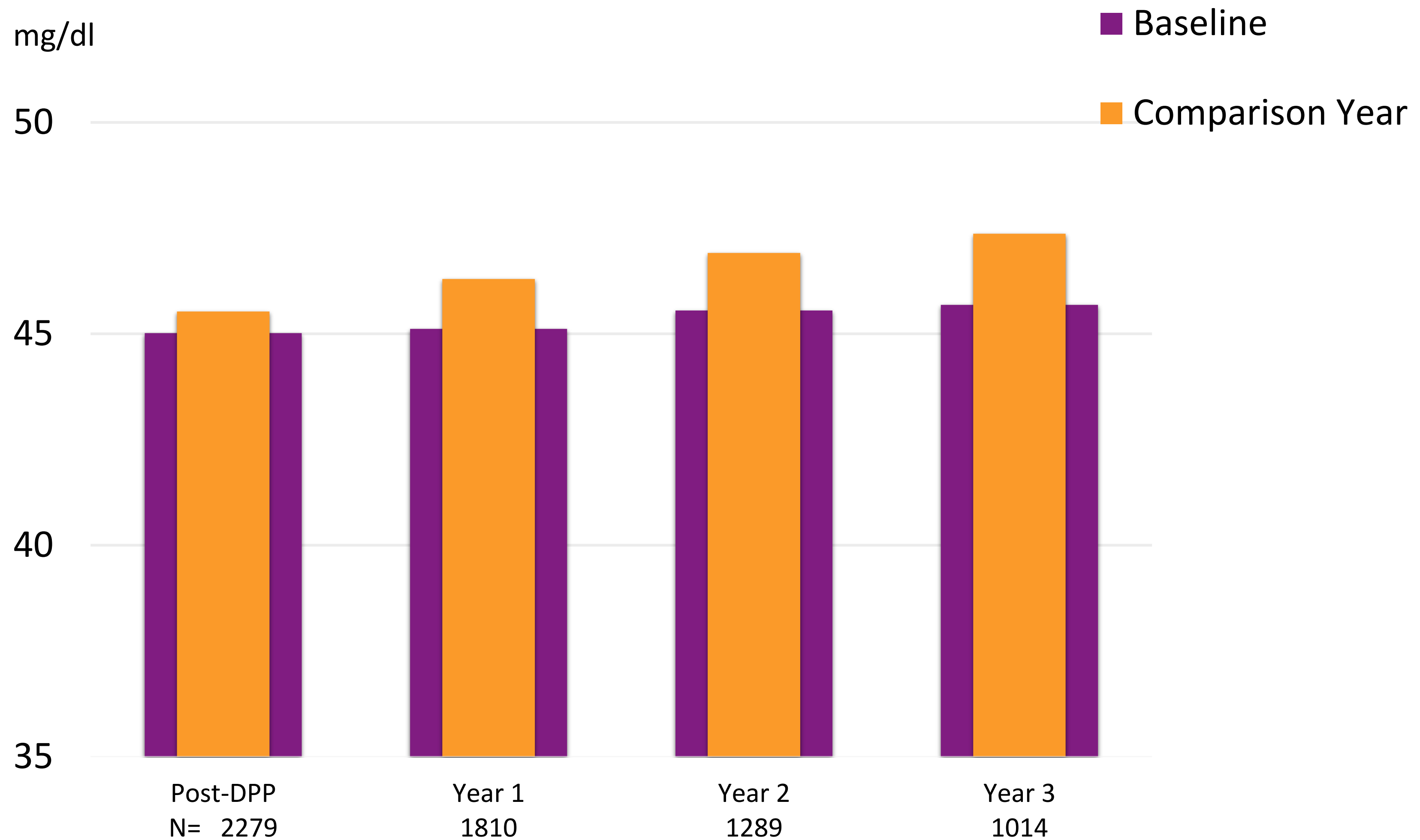
DP: Mean LDL Cholesterol

Pairwise Comparisons between Baseline (Start) and Each Program Year



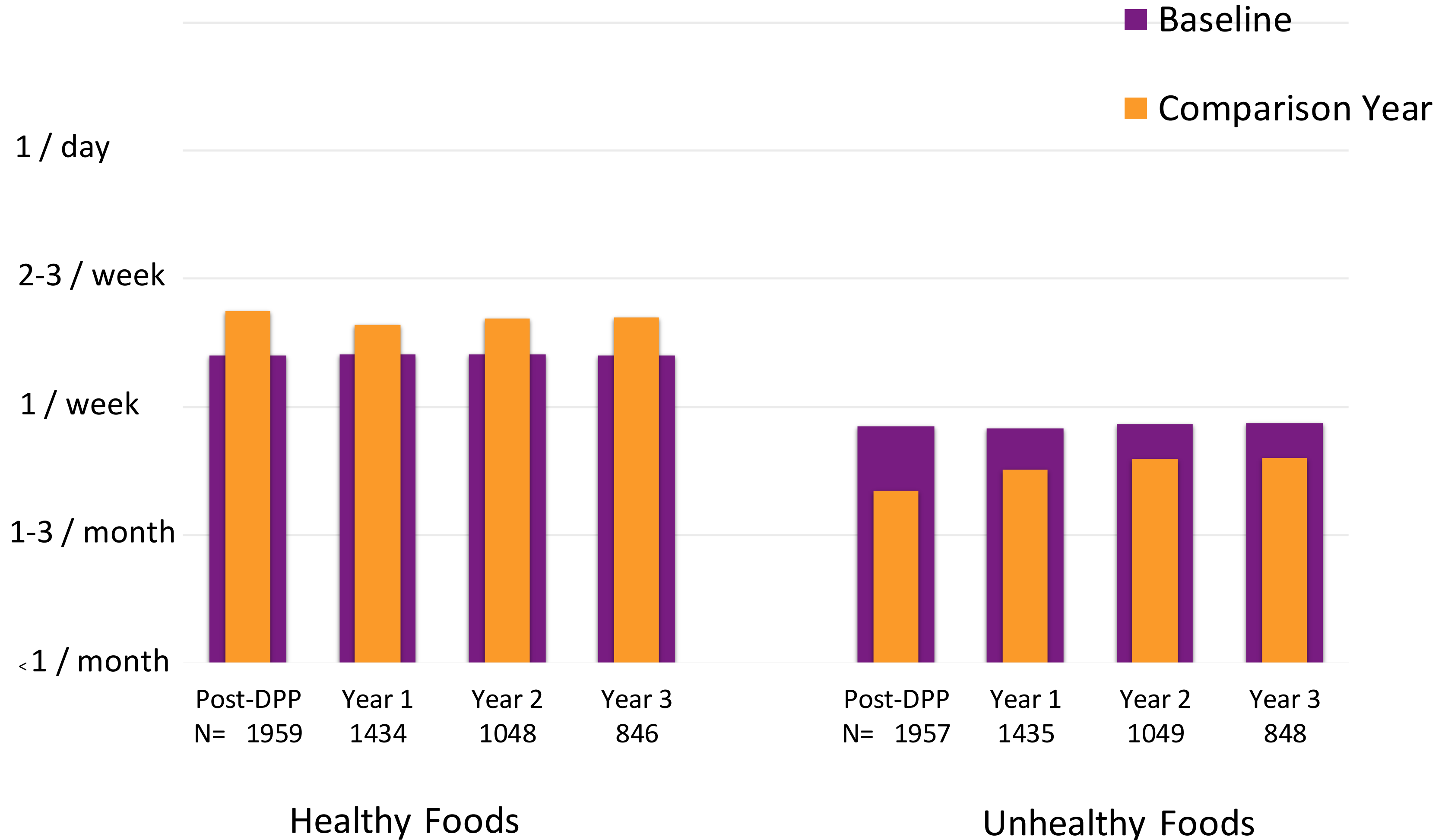
DP: Mean HDL Cholesterol

Pairwise Comparisons between Baseline (Start) and Each Program Year



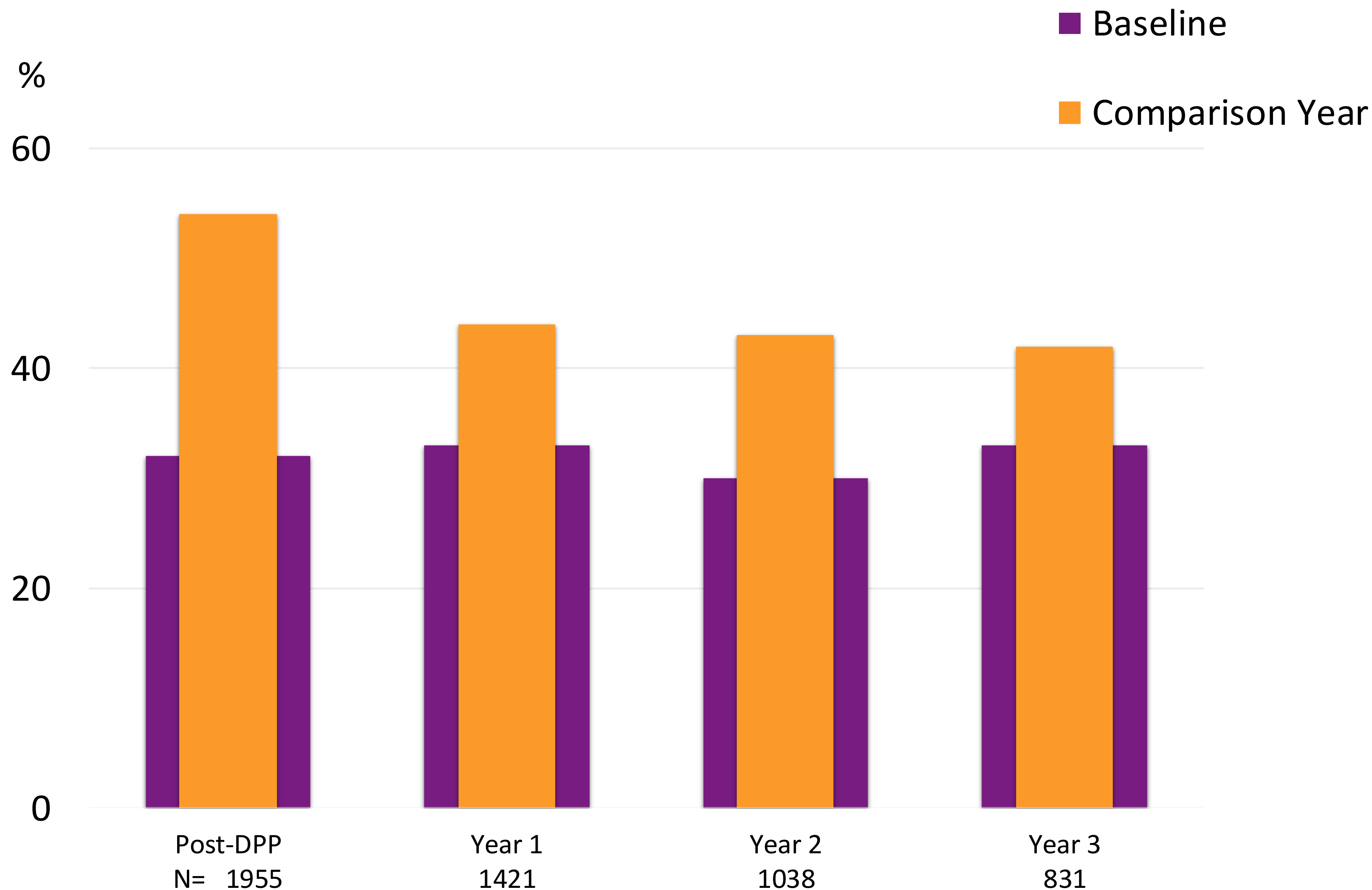
DP: Mean Frequency of Consuming Healthy and Unhealthy Foods

Pairwise Comparisons between Baseline (Start) and Each Program Year



DP: Percent Engaging in Active Physical Activity

Pairwise Comparisons between Baseline (Start) and Each Program Year

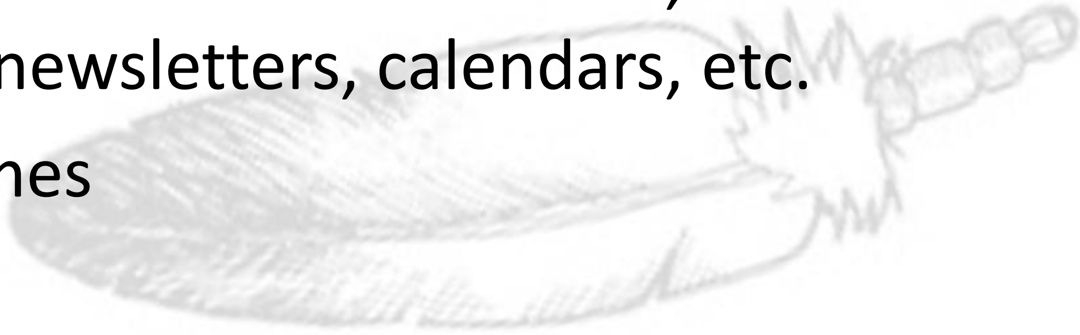


DP Implementation

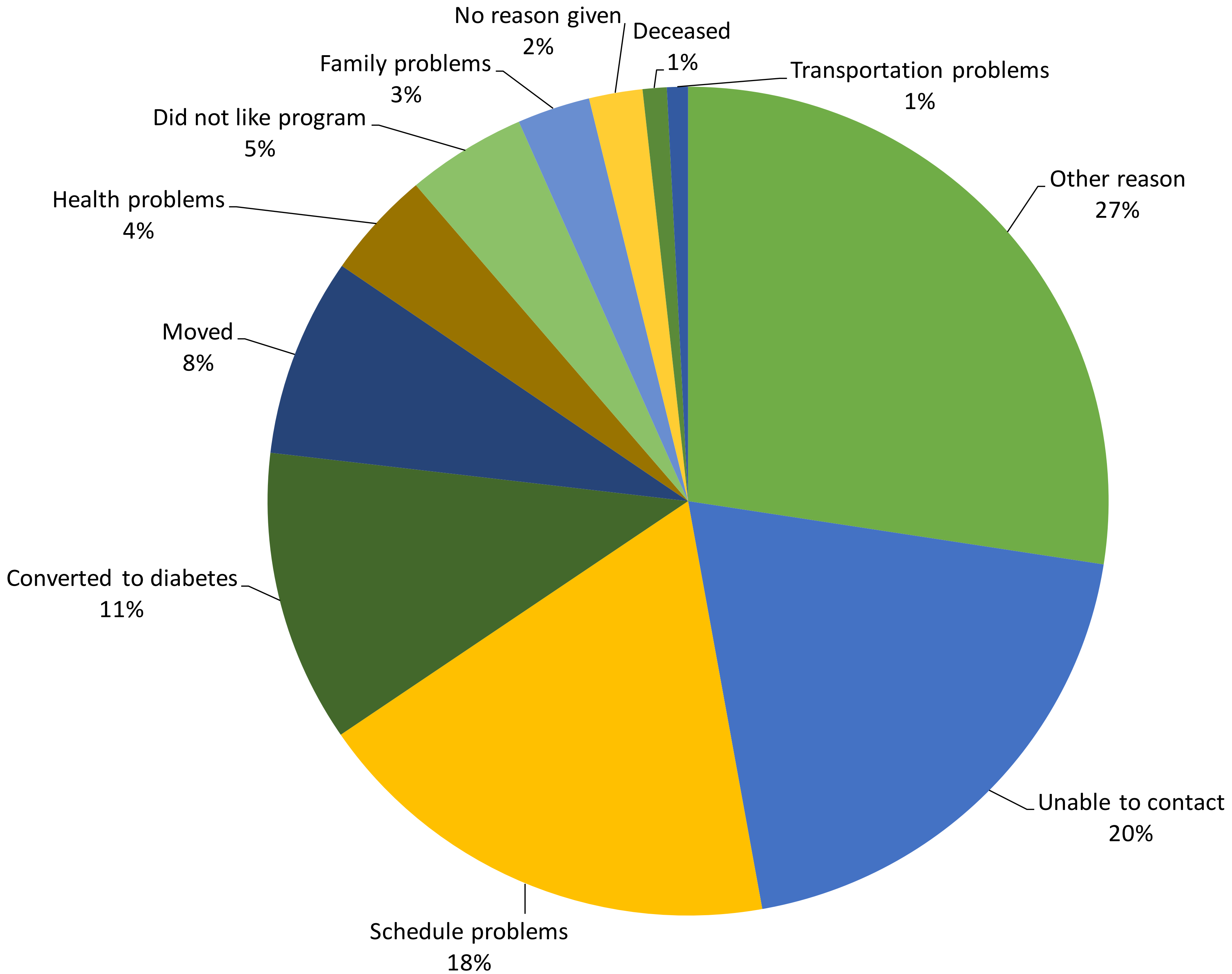
- Intervention Activities Delivered
  – Lifestyle Balance Curriculum Sessions: 105,767
  – Lifestyle Coaching Visits: 97,348
  – After Core Activities: 44,507
  – Assessments: 25,712 (15 are Year 10)
  – Mid-Year Glycemic Measurements: 9,740

DP Retention

- After Core
- Eliminating Barriers to Participation
- Retention Activities
  - Cooking demonstrations
  - Physical activity classes
  - Cultural events and activities
  - Frequent communication and contact, i.e. greeting cards, newsletters, calendars, etc.
  - Educational games
  - MUCH MORE!

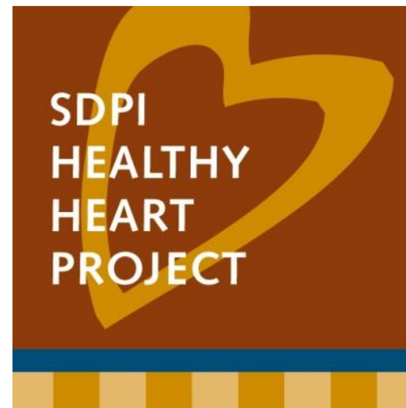


Diabetes Prevention: Reasons for Becoming Inactive



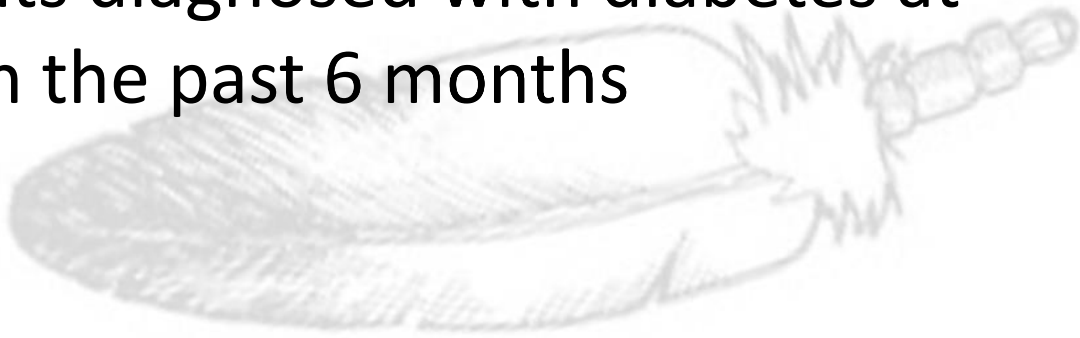
Program Successes & Outcomes

Healthy Heart Project



HH Recruitment

- 7579 Eligible participants recruited into the SDPI Healthy Heart Project through March 31, 2016
- 64% female, 36% male
- Mean age 53 years (18 to 93)
- Mean duration of diabetes 8 years
- 13% of participants diagnosed with diabetes at baseline or within the past 6 months



HH Recruitment

IHS Area			
Oklahoma	19%	Great Plains	7%
Portland	15%	Billings	7%
California	12%	Nashville	4%
Phoenix	11%	Navajo	3%
Bemidji	10%	Alaska	2%
Albuquerque	9%	Tucson	1%

HH Recruitment

- Billboards
- Brochures
- Calendars
- Community Activities
- Flyers
- Letters
- News Articles
- Presentations
- **Referrals**

REFERRAL FORM
NACA FHC/Health Promotion Program
1500 E. Cedar Avenue, Suite 26, Flagstaff, Arizona 86004
Phone# (928) 773-1245, Ext. 32 Fax# (928) 773-9429

Patient Name: ______________________ DOB: __________ Phone : ______________

☐ Patient consents to be contacted by NACA Health Promotion Office

Provide most recent laboratory and assessments to NACA Health Promotion Program
Or Attach most recent laboratory test results

Recent Lab Date: ______		Vitals and Assessment: Date: ______
A1C: __________	LDL: __________	BP: ______
Fasting BS: __________	VLDL: __________	HT: ______
GFR: __________	Triglyceride: __________	WT: ______
Total Cholesterol: ______	Microalbumin: ______	BMI: ______
HDL: __________		Waist Circumference: ______

Referring Provider to check appropriate box below

☐ **Diabetes Prevention Program:** Date of PreDM Diagnosis: __________ (requires PreDm Diagnosis)

☐ **Diabetes Self Management Education Program:** Date/Year of Diagnosis: __________
(Individual appointments, support group and classes available)

☐ **Cardiovascular Disease Prevention Program**
(Open to anyone)

☐ **Healthy Living Classes**
(Wellness and adult weight management classes open to anyone)

☐ **Registered Dietitian** *(by individual appointment only)*

☐ **NACA Wellness Center** *(NACA Medical clearance form from NACA must be completed)*
Individual assessments and prescribed sessions available. Group Fitness Classes available

Provider Notes: *(restrictions, medications, other recommendations)*

Referring Provider: ______________________ Date: __________
Referring Facility: (Please check below)
____ Sacred Peaks Health Center
____ NACA Health Center
____ Other Facility: ______________
Facility Phone Number: ________

SDPI HEALTHY HEART PROJECT

Special Diabetes Program for Indians

St. Croix Tribal Health Clinic

715-349-8554
877-455-1901

The purpose of the program is to reduce the risk of heart disease in people with diabetes.

You could have heart disease if :

- You have diabetes
- You have high blood pressure
- You have high cholesterol
- You don't have enough physical activity
- You weigh more than you should
- You are a smoker

The Healthy Heart Program can help you manage your diabetes and reduce your risk of heart disease. Just give us a call or stop in for more information.
Pam Nichols BSN RN CDE or Lucy Leef CNA CHR
715-349-8854

Who can join the Project?

We are looking for people age 18 and older who have the diagnosis of type 2 diabetes and hare interested in reducing their risk of cardiovascular disease.

You should be willing to participate in monthly clinic visits with a case manager.

You should be willing to stay in the project for up to 3 years.

How can I join the Project?

Let the project staff know that you are interested in volunteering for the project.

They will schedule you for a medical visit to confirm that you are eligible.

If you are interested in volunteering for the project, we will explain the project to you and answer any questions.

Please call for more information:
Phone: 918-675-2044
Other: 918-675-2051

NTHS Heart Savers

Special Diabetes Program for Indians

NTHS Diabetes & Wellness Center
Shawnee Community Building
108 Eight Tribes Trail
Miami, OK 74354
918-675-2044

NE Tribal Health System Heart Savers Program

Special Diabetes Program for Indians

Diabetes & Wellness Program

Tel: 918-675-2044

What is the Heart Savers Project?

The purpose of the project is to reduce the risk of cardiovascular disease in people with diabetes.

- Diabetes is a serious problem for American Indians.
- Cardiovascular disease, which affects the heart and blood vessels, is a major complication of diabetes and the number one cause of death for American Indians.

Research has shown that it is possible to reduce your risk of cardiovascular disease by:

- Controlling blood pressure, cholesterol and blood glucose levels.
- Stopping smoking.
- Taking an aspirin a day.
- Losing weight through a healthier diet and physical activity.

We are looking for volunteers with diabetes to participate in this project, which includes case management services, diabetes clinic visits, and education to reduce risk for cardiovascular disease.

Could I have Heart Disease?

Most people do not know if they have cardiovascular disease until they have an emergency, such as a heart attack or stroke.

You could have heart disease if:

- You have diabetes.
- You have high blood pressure.
- You have high cholesterol levels.
- Your blood glucose (sugar) is too high.
- You weigh more than you should.

Why should I join the Heart Savers Project?

The Heart Savers Project can help you in several ways:

- We will watch your health closely.
- You will continue to get free checkups and other needed medical tests.
- You will be offered classes on managing your diabetes and reducing your risk for cardiovascular disease.
- You will help us learn the best ways to prevent cardiovascular disease.

Taking part in this project is voluntary.

More information on Reverse

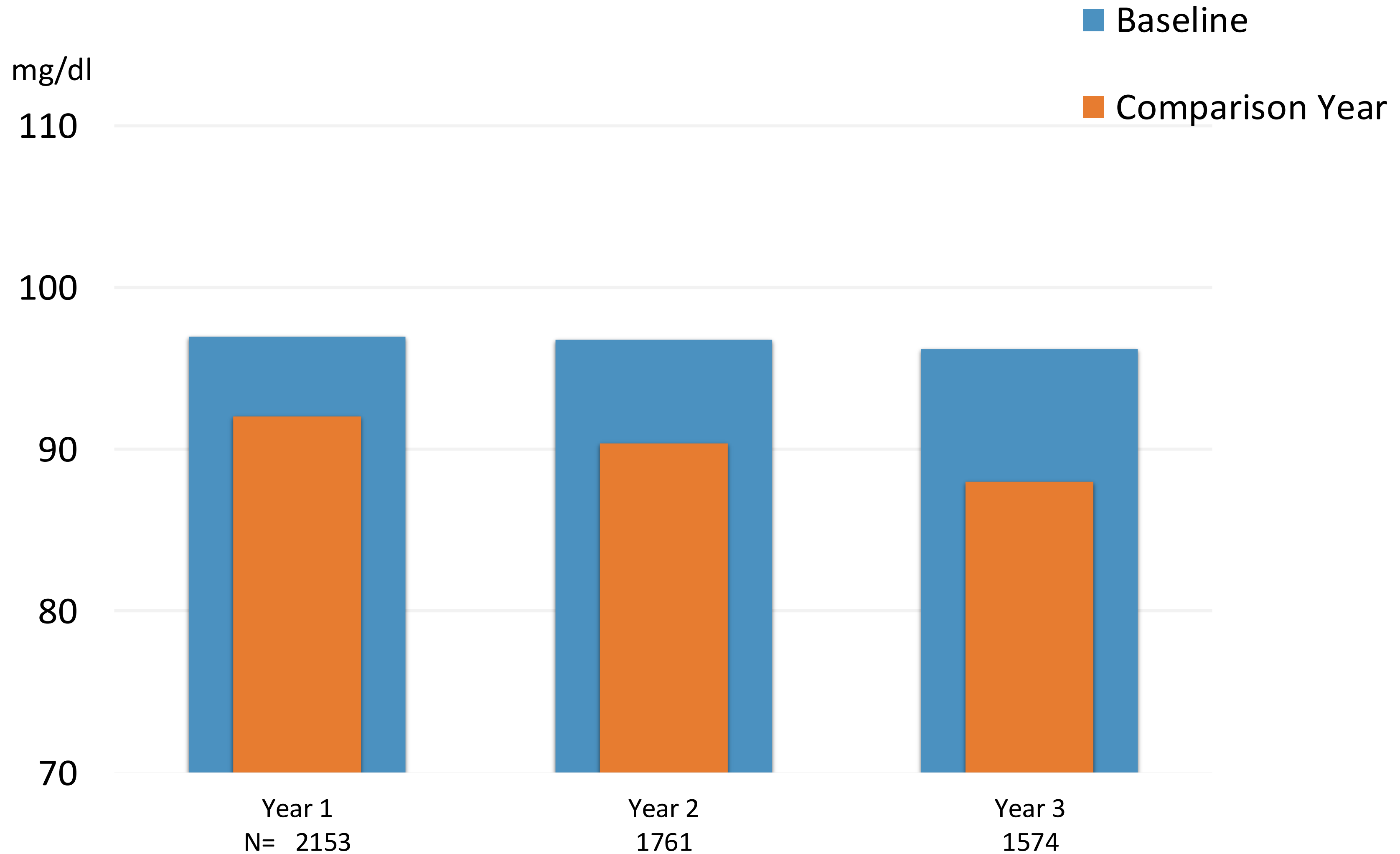
HH Outcomes

- Improvement in Lipid Levels
- Decrease in Blood Pressure
- Smoking Cessation
- Improvement in Framingham CVD Risk Score
- Weight Loss
- Increase in Healthy Foods Consumption
- Decrease in Unhealthy Foods Consumption

*Outcomes presented on 3353 participants who enrolled during the full evaluation phase

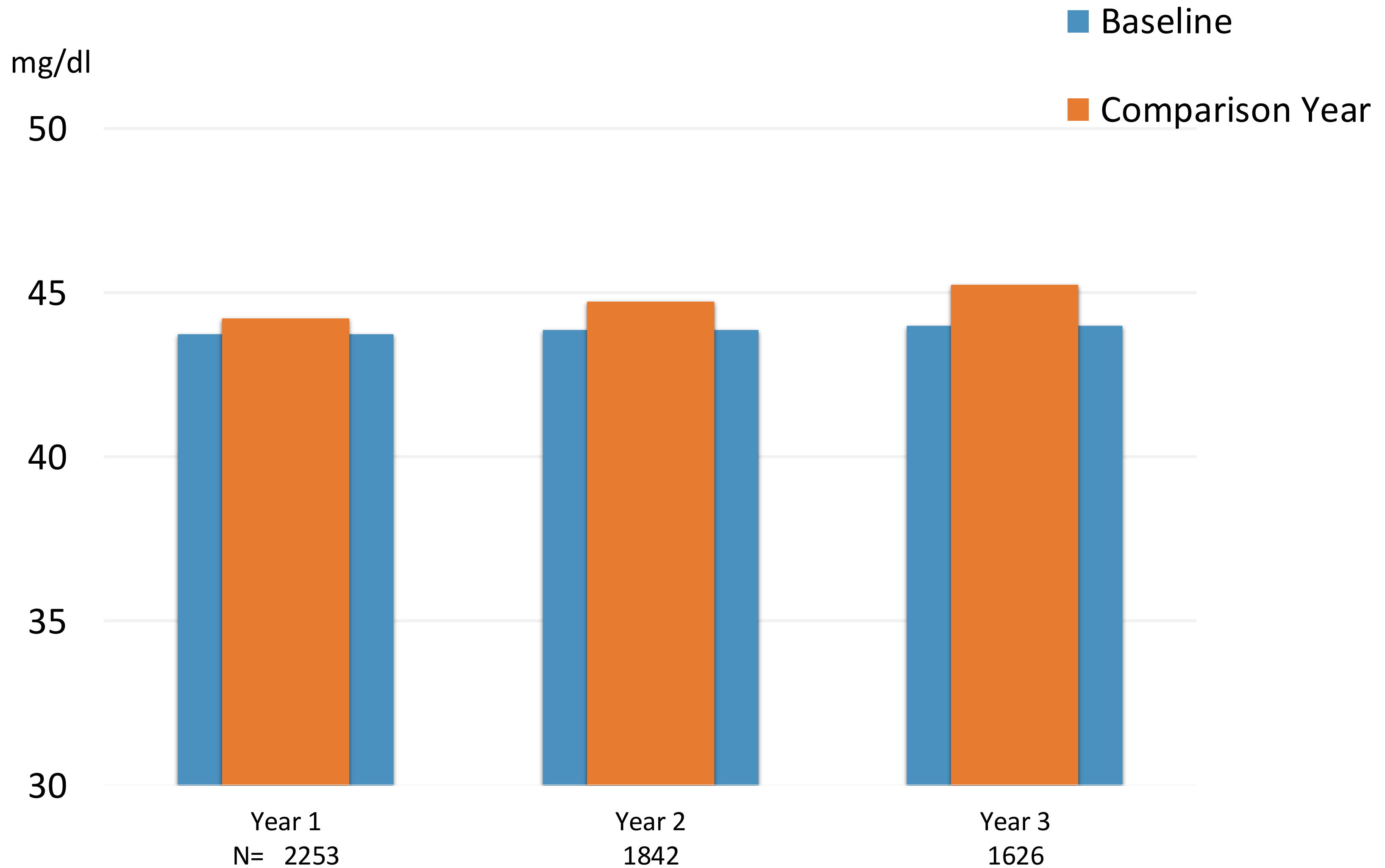
HH: Mean LDL Cholesterol

Pairwise Comparisons between Baseline (Start) and Each Program Year



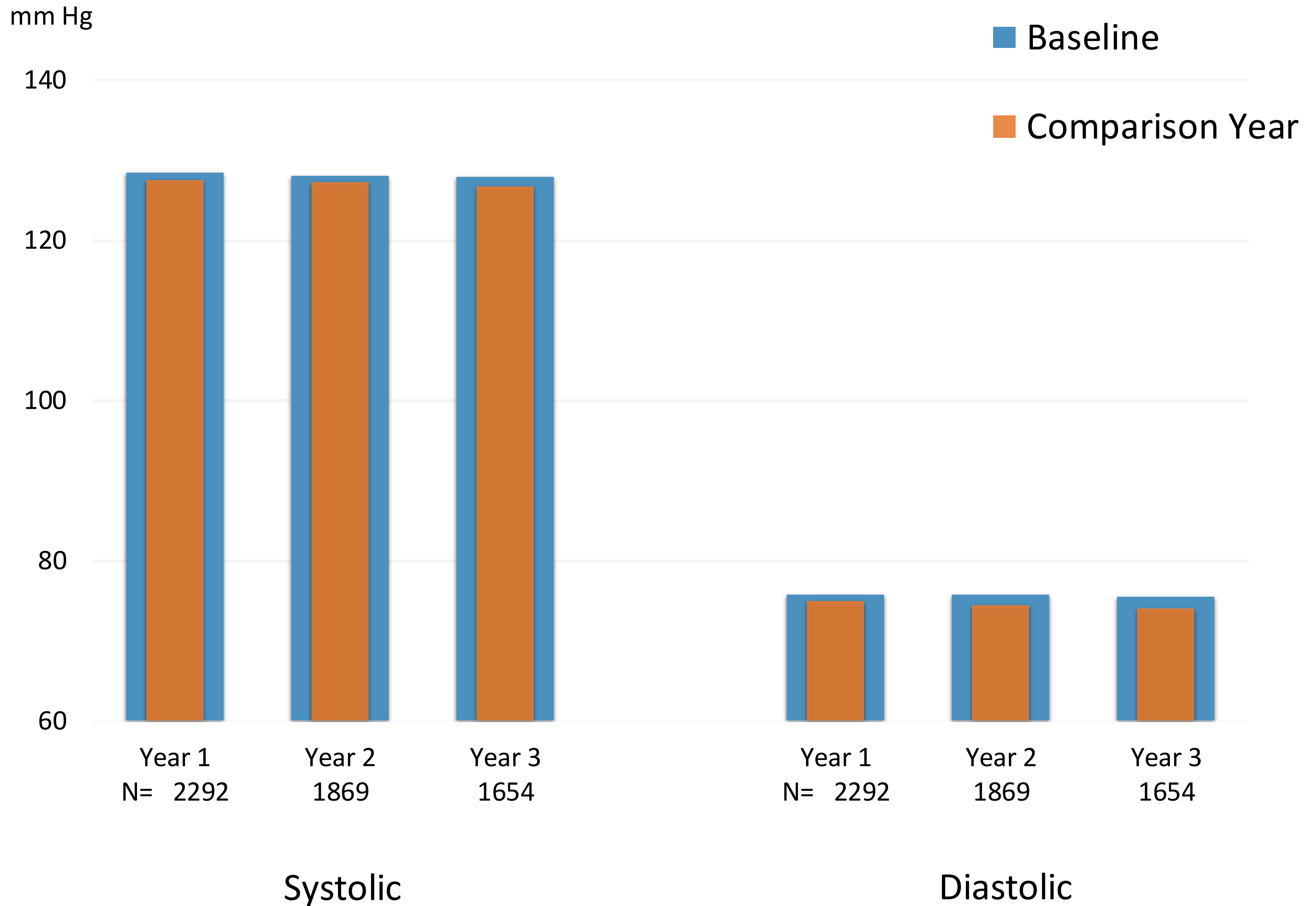
HH: Mean HDL Cholesterol

Pairwise Comparisons between Baseline (Start) and Each Program Year



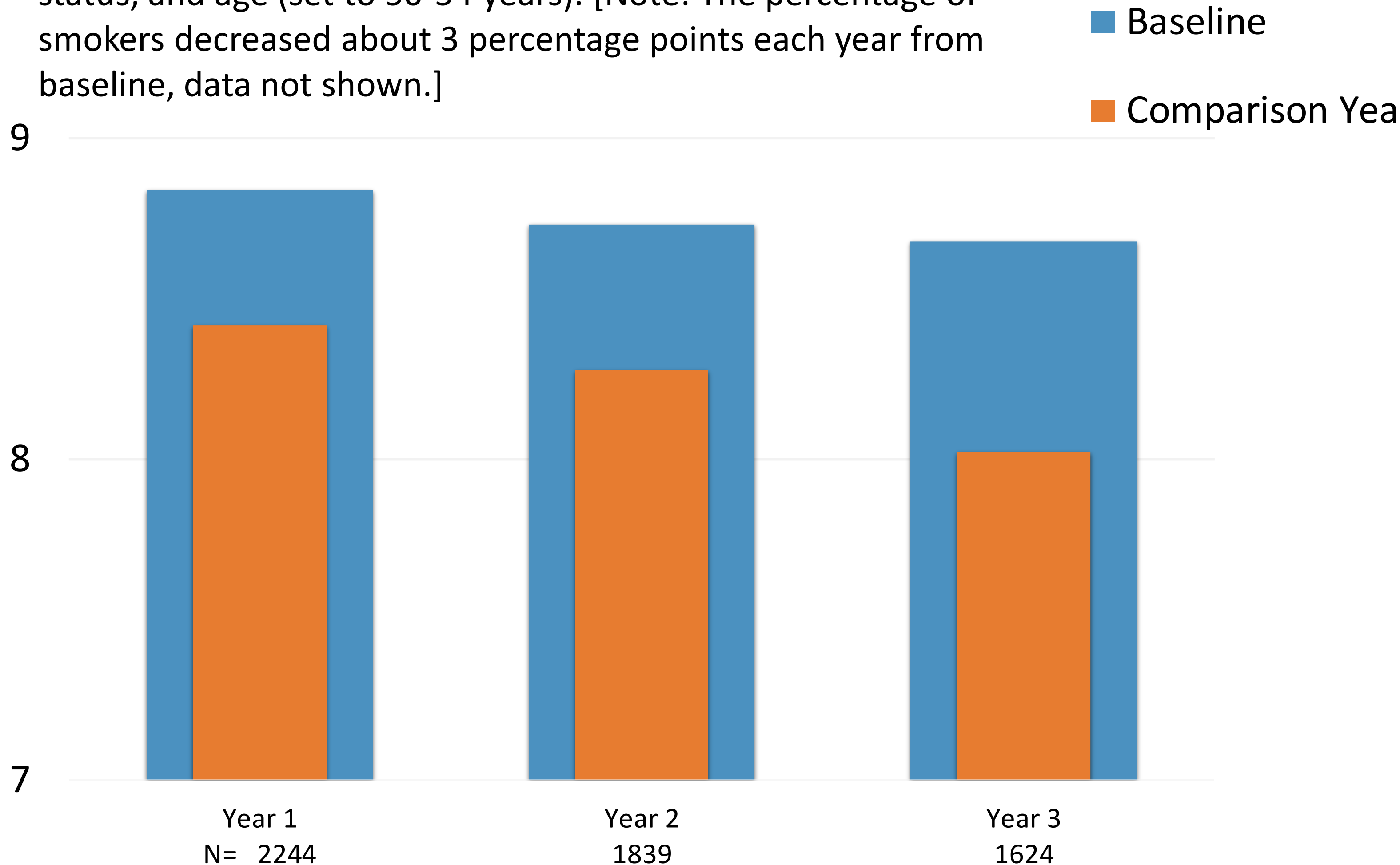
HH: Mean Blood Pressure

Pairwise Comparisons between Baseline (Start) and Each Program Year



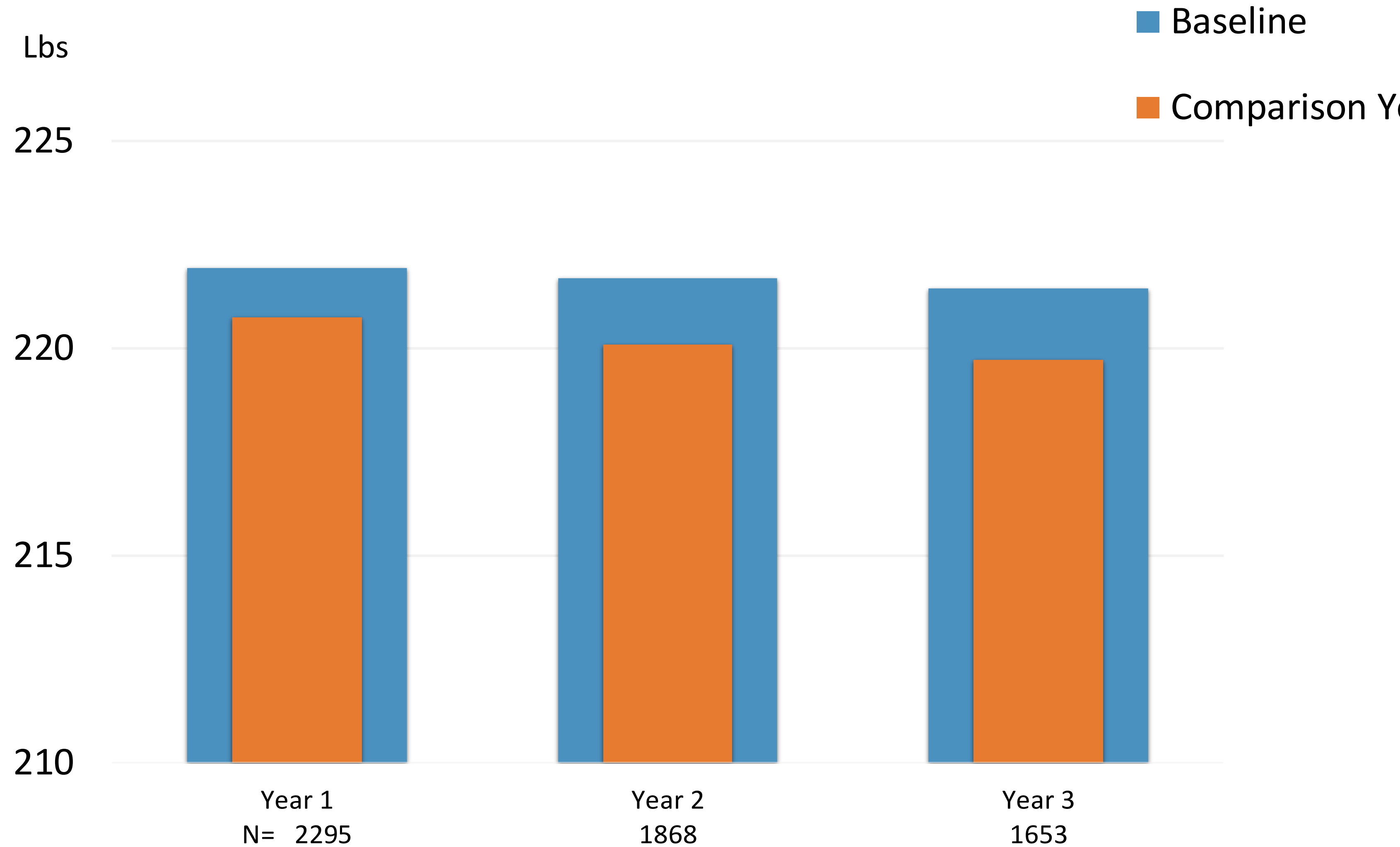
HH: Mean Framingham CHD Risk Score

Pairwise Comparisons between Baseline (Start) and Each Program Ye



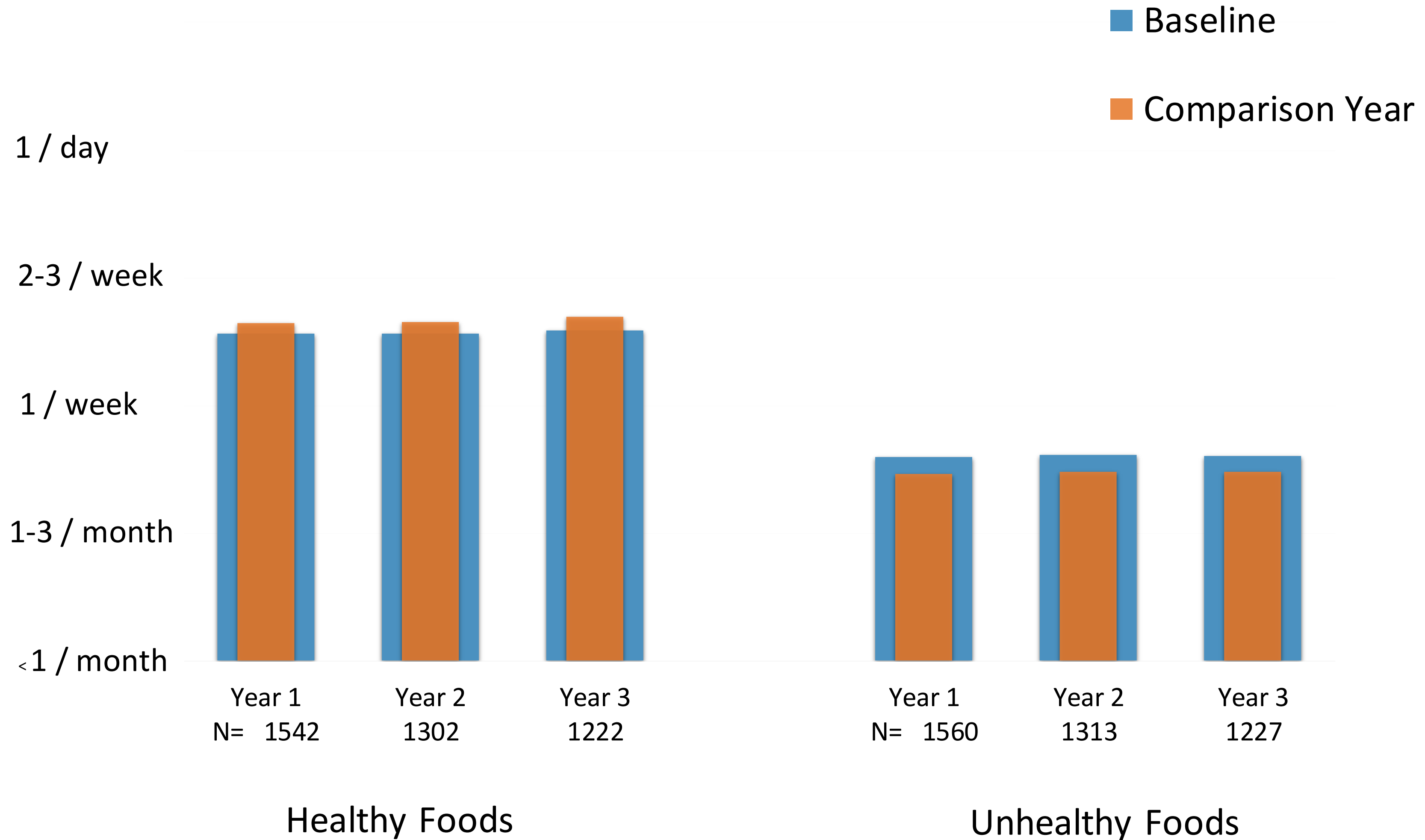
HH: Mean Weight

Pairwise Comparisons between Baseline (Start) and Each Program Y



HH: Mean Frequency of Consuming Healthy and Unhealthy Foods

Pairwise Comparisons between Baseline (Start) and Each Program Year



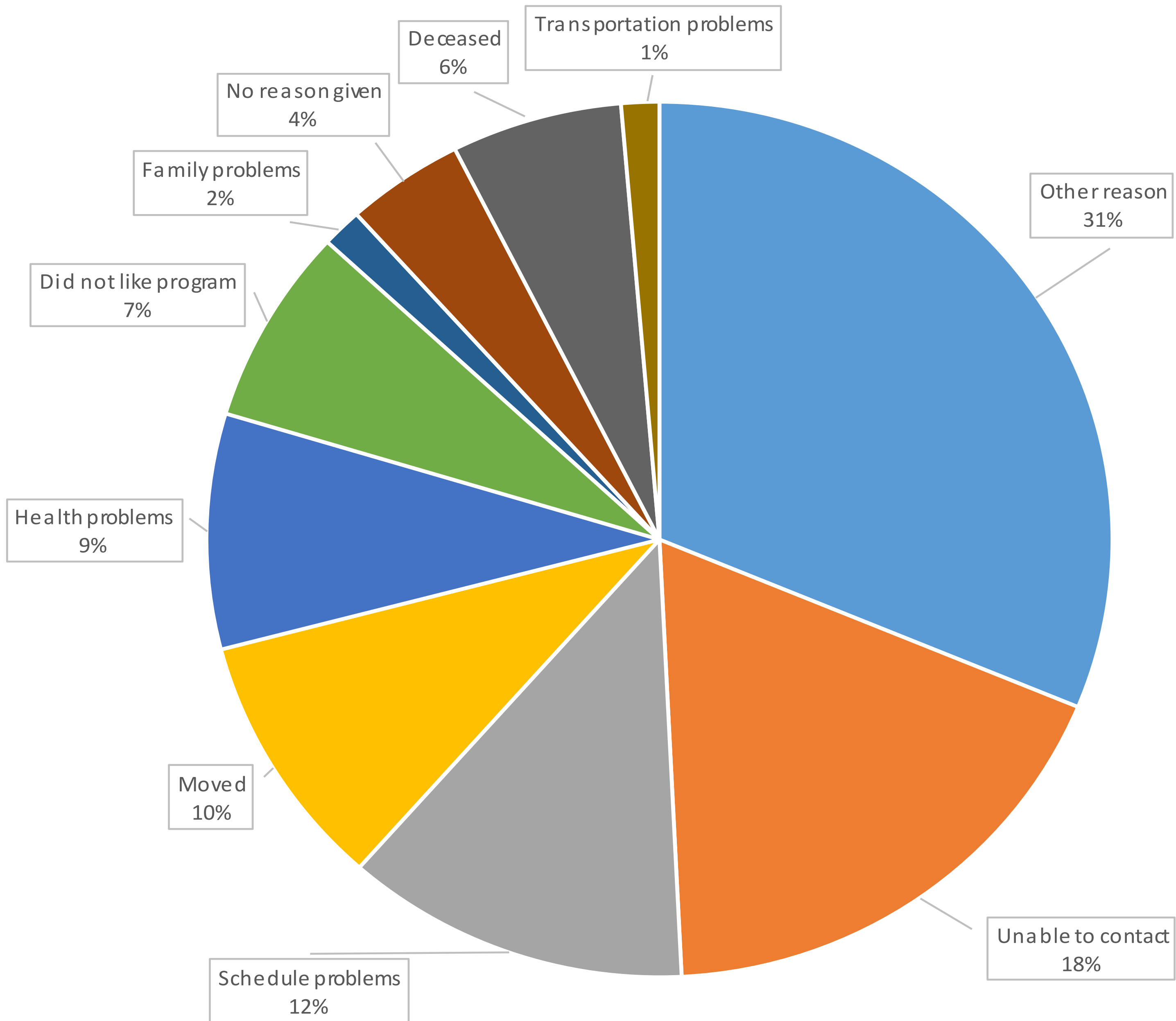
HH Implementation

- Intervention Activities Delivered
  - Case Management Visits: 136,509
  - Other Group Activities: 13,636
  - Assessments: 25,726 (71 are Year 10)

HH Retention

- Eliminating Barriers to Participation
- Retention Activities
  - Gardening
  - Cooking demonstrations
  - Physical activity classes
  - Cultural events and activities
  - Postcards, letters, cards, etc.
  - MUCH MORE!

HH: Reasons for Becoming Inactive

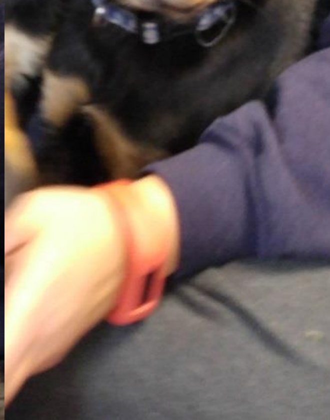


Lessons Learned

- Common activities
- Detailed evaluation
- Collaborative process
- Program staff
- Retention is a challenge
- Support
- Resources

Summary

- DP & HH Demonstration Projects and Initiatives have achieved good results overall
- Importance of evaluation
- Successes and lessons learned can be useful tools and resources



Local-Level Success

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