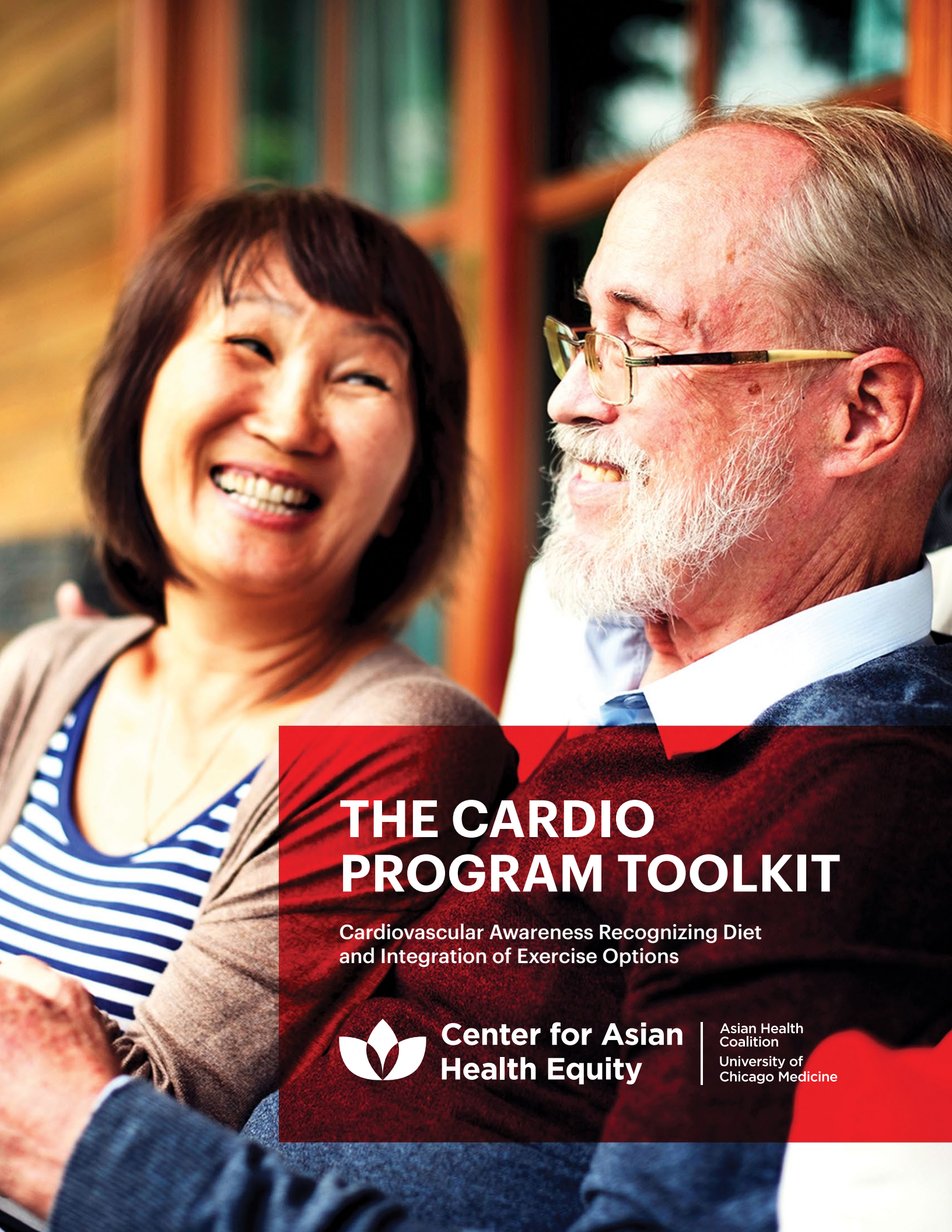




THE CARDIO PROGRAM TOOLKIT

Cardiovascular Awareness Recognizing Diet
and Integration of Exercise Options



**Center for Asian
Health Equity**

Asian Health
Coalition
University of
Chicago Medicine

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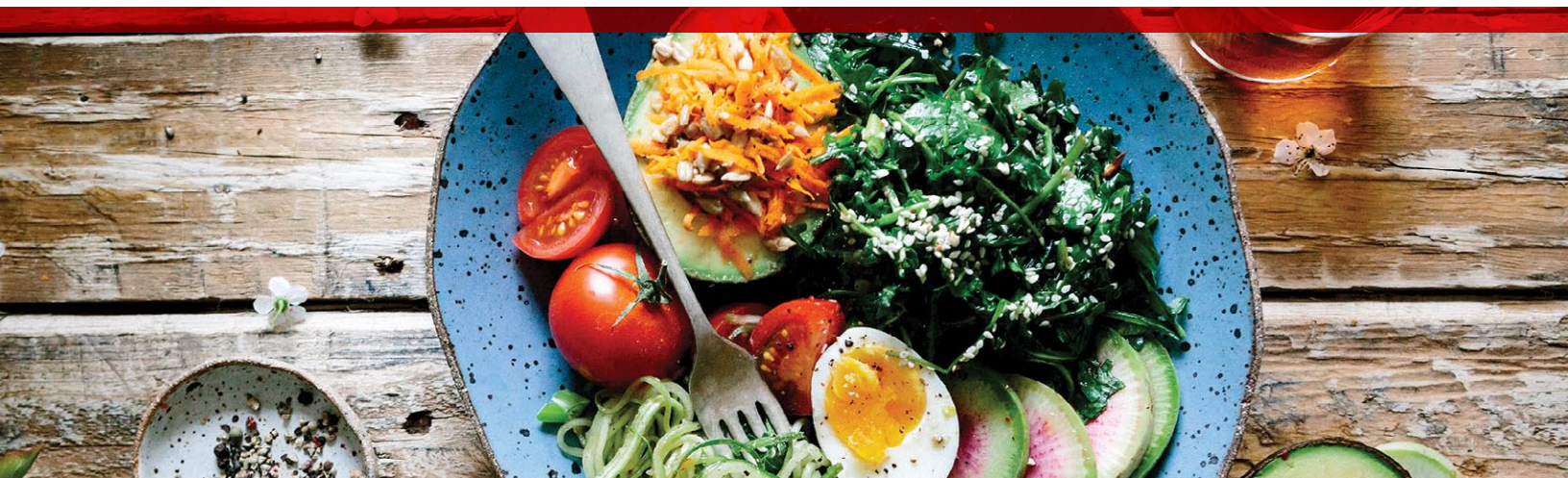
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The Asian Health Coalition is a non-profit 501(c)(3) organization established in 1996 to improve the health and well-being of Asian Americans in Illinois through community-based education, capacity building, health advocacy, and research.





02

Introduction

Despite continued advances in life-saving medications and devices, heart disease remains the number one cause of death among Americans. One in every four deaths is caused by this common condition (Centers for Disease Control and Prevention, 2020). With growing levels and less than optimal control of diabetes, hypertension, and other risk factors, prevention of heart disease is essential. By distinguishing specific Asian ethnic communities from one another, heart disease has been found to significantly impact communities like the South Asian and Chinese communities.

The South Asian population remains at high risk for developing heart disease and related comorbidities. They are the only racial group in Chicago to have both diabetes and

cardiovascular disease (CVD) in the top four leading causes of death and are 4 times more likely to develop CVD than the general population (Harper-Jemison et al., 2009). Among the South Asian population, studies show increased risk of early development of CVD at a lower BMI (Volgman et al., 2018).

The Chinese population also remains at high risk for CVD and other related comorbidities at a lower BMI. With the increasing Asian American population in America, it is critical to target specific Asian ethnic groups with CVD education tailored to the community. Although genetics may play a role in this elevated risk, modifiable risk factors, such as poor diet and lower physical activity, may contribute to the burden of this disease.

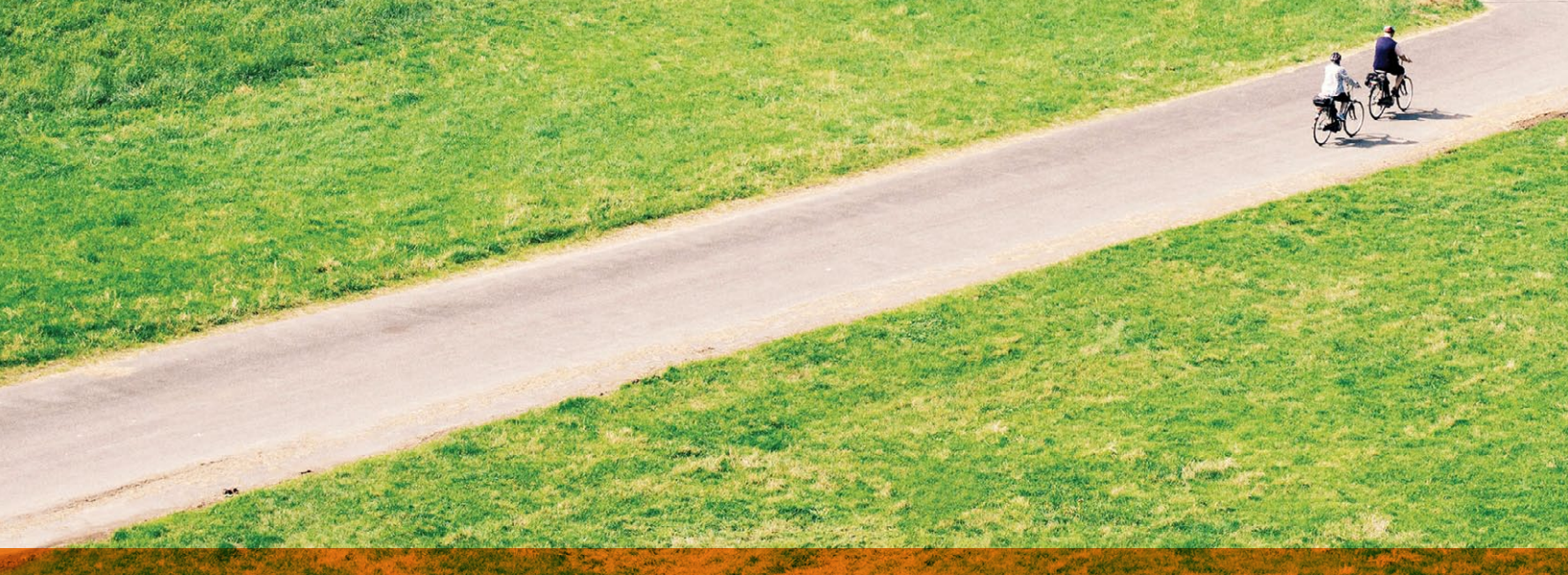
THE CARDIO PROGRAM

To address this issue, the Cardiovascular Awareness Recognizing Diet and Integration of Exercise Options, or CARDIO, program focuses on educating at-risk patients and encouraging the implementation of lifestyle changes to decrease the risk of developing CVD and other chronic diseases. CARDIO is a peer-led program with the goal of strengthening awareness and management of heart disease among underserved and high-risk communities. The program uses a multipronged approach by providing a healthy and inclusive learning environment, incentives based on participation, regular health screenings, and various teaching strategies to support the best health results for targeted communities.

The CARDIO program focuses on lifestyle modifications to increase health literacy around CVD and its comorbidities, and develop healthy habits in and across communities. The curriculum focuses on tailoring health concepts and techniques to make them relevant to a specific population. When teaching about a healthy diet, we include foods that are in the population's cuisine; when discussing exercise, we take into account the change in a person's lifestyle across lifespan and locality; when addressing unhealthy habits, we inform ourselves of culturally specific alternatives to, for example, tobacco products and work to break down long-held and misinformed beliefs that have contributed to existing health disparities.



The Center for Asian Health Equity (CAHE), a partnership between the Asian Health Coalition and the University of Chicago Medicine, designed this toolkit to help other organizations implement programs like the CARDIO program to help their communities. We hope that all stakeholders interested in developing or supporting community-based programs and interventions to decrease the risk of CVD and other chronic conditions in low income or underserved communities may benefit from this information. This step-by-step guide is intended to provide the tools and recommendations needed to carry out a program from planning to evaluation.



03

Program Planning

IDENTIFY + ENGAGE STAKEHOLDERS

The most important step of any successful program is to have investment from multiple people. This is accomplished by engaging a variety of stakeholders from various backgrounds.

During the planning phase for the CARDIO program, we first contacted and collaborated with stakeholders we have previously worked with to reach our target populations. These stakeholders included staff at clinics and organizations, medical experts, and other community members who provided insight into heart healthy lifestyle behaviors and cultural competency of the program. We also conducted an environmental scan to identify stakeholders we may not have previously collaborated with, including organizations in neighborhoods that are an asset

to the target audience, such as cultural centers, student and faith-based organizations, schools, direct service providers, libraries, etc. Below is a list of different types of stakeholders to identify and engage with.

Funders - Monetary resources are provided to the program to implement the interventions and provide incentives to participants.

Experts – These are often individuals who have a comprehensive and authoritative knowledge in a particular area. In terms of the CARDIO program, experts are clinicians, medical students, and organizations with demonstrated expertise in cardiovascular health and commitment to addressing chronic disease. Engaging expert stakeholders from the beginning increases program credibility and ensures participants receive accurate information.

Community Members - Engaging individuals from the target community is key for program success. This goes beyond just having them at the table to provide insight, but also giving them leadership roles throughout the program.

Community Organizations – Intentional partnerships with community organizations can support recruitment and retention of participants. One of the main strategies for program success is collaboration with already existing community organizations that have active or regular clients. The program develops new and pre-existing relationships and communication channels between community organizations and their members to recruit participants. Establishing new partnerships is advantageous in bringing programs beyond commonly used communication channels. Building new connections can be done through a warm handoff through a mutually known community member or through cold contact. However it is done, emphasizing the importance of the program, its potential impact on the community, and the organization's role is critical.

CARDIO has partnered with Community Health Centers and Community-Based Organizations to identify at-risk individuals and invite them to participate in the program. Community Organizations also support the credibility of the program and likelihood of its acceptance in the community, because of the existing trust that has been established. For the CARDIO program, some organizations also provided space to hold classes, which were convenient and comfortable for participants.



Clinical Partners - Clinics give participants the medical support they need and can follow up with any health problems. If health screening results suggested that a participant had high blood pressure, it was important to have a clinical partner for referral if that participant did not already have a primary care physician. Clinical partners can also give feedback and advice on program topics.

BEST PRACTICES

Stakeholders should be selected early on and included in key steps of program planning to ensure engagement and ownership.

Conduct an environmental scan. This will support the identification of potential stakeholders.

Engage with a variety of stakeholders to gain multiple perspectives and reach your target community more broadly.

CURRICULUM DEVELOPMENT

Before pinpointing content for the education curriculum, we identified three major goals of the program:

- 01

Increase awareness of heart disease in high-risk populations
- 02

Implement lifestyle interventions to help decrease risk of developing cardiovascular disease + comorbidities
- 03

Form a supportive community allowing all people to lead happier, healthier lives.

For the educational portion of the CARDIO program, we utilized the National Institutes of Health’s *Your Health is Golden* curriculum, created specifically for the Vietnamese community. Under the guidance of stakeholders (see ‘Identify and Engage Stakeholders’), activities were adapted to best fit the target community.

The final curriculum includes 6 classes covering heart disease, blood pressure, diet, staying active and quitting smoking, diabetes, and heart attack and stroke. Each class was designed to be approximately one hour, with an additional 15 minutes for survey taking (see ‘Meeting Duration and Frequency’). Three screenings also accompanied the curriculum and were collected during enrollment, about 3 months, and about 6 months after program initiation (see ‘Survey Collection Process’). A timeline of the curriculum and evaluation can be found in Appendix A.

CARDIO PROGRAM SESSION TOPICS



HEART DISEASE



BLOOD PRESSURE



HEALTHY EATING



ACTIVITY + QUITTING SMOKING



DIABETES



HEART ATTACK + STROKE

It is critical to consider culture when adapting existing materials. For example, food is very integrated into culture, and it can be hard to change culturally informed eating habits. Therefore, it is important to consider practical ways to encourage healthy eating based on what community members eat and how they cook. Dishes like Biryani and samosas were integrated into the discussion on nutrition and healthy eating for the South Asian community, and dim sum dishes were integrated into the curriculum for the Chinese community.

To improve retention and help participants think about how to apply CARDIO lessons to their lives, we asked participants visualize how they would prepare healthy food items, exercise with their families, and make time to care for their health. Incorporating homework, such as finding a creative way to exercise for 30 minutes every day, reading the nutrition labels on food products, and opening dialog with friends about heart disease, helped participants begin applying and forming new, healthy habits.

DETERMINE PROGRAM STRUCTURE

Meeting Duration and Frequency

Regarding the duration and frequency of your meetings, it is important to consider optimizing participation and retention. While frequent meetings could lead to better retention of lesson content, the high commitment may deter participation. Less frequent or shorter meetings would be less of a commitment but may result in less knowledge retention. We recommend finding a balance: design longer, less frequent classes or shorter, more frequent classes. Currently, the CARDIO program has six classes held once a week for 75 minutes.

BEST PRACTICES

Choose an evidence-based curriculum for your program that is appropriate for your target audience. Finding tools that have already been proven effective in communities with similar demographics to the one you are targeting will be advantageous during program planning.

Avoid using technical terms and jargon like “recommended” and “comorbidity” to ensure participant comprehension. If these types of terms must be used, be sure to define them.

Consider incorporating homework ideas that are linked back to class and provide an opportunity for participants to apply lessons learned.



CARDIO participants practice exercises during an in-person class

Class Size

Enrolling too many participants in a single class can affect participant engagement and retention of the class material. That can also limit the application of lifestyle modifications taught in the class. Opposed to one-on-one interactions, a class setting can allow for relationship building and mutual encouragement and accountability among the participants. We recommend a class size of approximately 5-15 participants so that each participant will be given adequate attention. If larger classes must be held, we recommend extending the class duration to allow for more participants to actively share and participate, along with additional interactive activities and enrollment into classes where participants may have existing relationships with one another.

BEST PRACTICES

Get to know the community and how frequent meetings need to be to have consistent attendance. Are there educational classes already held in the community? How frequent are they? How long are they held?

Engaging couples and friends together in the same class can facilitate accountability to apply lessons learned and can help a larger class feel more interactive and comfortable.

“As I continued to teach the class, I started to talk about the CARDIO program with my family and friends and how I thought it would benefit if they join to learn and improve their heart health. Because I had family members in my class there was a sense of emotional or mental benefit for me, as a family we are encouraging and motivating each other towards a healthier lifestyle.”

LINA (CARDIO instructor)





REMOTE LEARNING ACCOMMODATION

Due to the COVID-19 pandemic, we transitioned to remote learning like many others. To best adapt the program for a virtual setting, we conducted a technology assessment to see what virtual platform works best for the target audience. This can be done through community or participant surveys or asking stakeholders what works best for the community. We adapted the CARDIO program for videoconferencing (i.e. Zoom) and messaging applications (i.e. WhatsApp). Despite being able to hold classes that participants can access at any time with a virtual adaptation, programs are more effective if they occur at an exact time (i.e. no pre-recorded lectures) to allow for participant interaction.

It would be ideal to conduct the online program with two facilitators. One facilitator can focus on teaching the content and the other can provide

technical support, track participation, and make sure surveys are completed. One of the biggest challenges to virtual implementation is staying within the allotted class time. Facilitators for the CARDIO program have utilized phone alarms or reminders to ensure class content and surveys are completed within the class time.

During the initial class whether in-person or virtual, set group norms along with participants. For example:

- Practice timely attendance.
- Listen respectfully to others & mute themselves to eliminate background noise.
- Avoid discussions outside of class topic.
- Participate during online session and complete surveys on time.
- Maintain confidentiality.

Engagement can also be particularly difficult in a virtual setting. Videoconferencing and messaging software have useful features, such as breakout rooms or voice notes, that can be utilized to engage participants in various activities and class content. One of the best forms of engagement during the CARDIO program was when facilitators shared their own stories about making heart healthy choices and invited participants to share their stories. This empowers participants and fosters mutual support and accountability among the class participants. Increasing interactive elements and making the curriculum as applicable and accessible as possible can facilitate engagement. Visual representations, such as a cartoon showing the functions of glucose and insulin in diabetic individuals or an illustration depicting the harmful chemicals of a cigarette, can make abstract concepts more concrete.

BEST PRACTICES

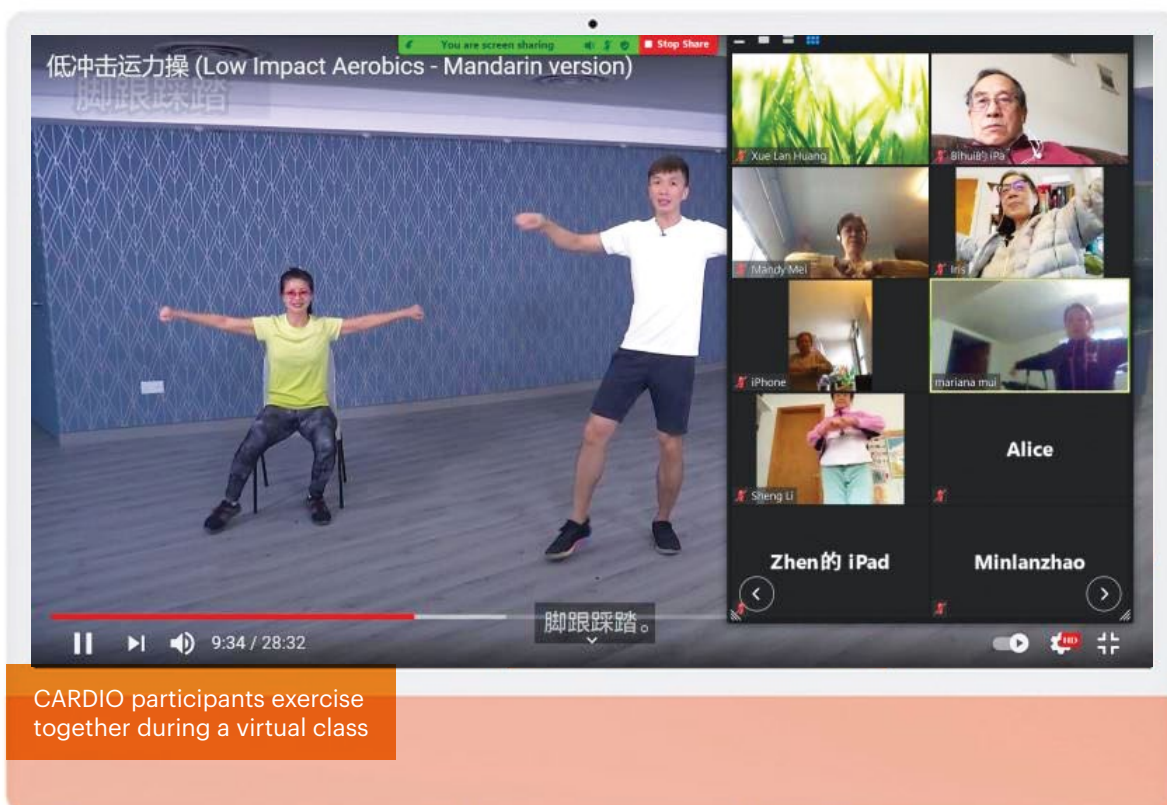
Conduct a technology assessment to identify a virtual platform(s) that are most accessible for the community.

Hold classes synchronously.

Split responsibilities between 2 facilitators at each class, one to focus on teaching and the second to provide technical support and ensure administrative needs are met.

Establish group norms. Ensure participants have an opportunity to add to or modify the group norms, then agree to follow them.

Incorporate more interactive elements into the program curriculum to improve engagement and retention.



Program Implementation

04

OUTREACH

Community Health Ambassadors (CHAs) play a key role in outreach to the community and implementation of the program. We trained CHAs to deliver the program and relied on their network to reach the community and recruit participants. CHAs must be motivated, passionate, and preferably have some background knowledge in the health topic. Identified stakeholders should also be utilized to disseminate program information (see 'Identify and Engage Stakeholders').

There are a variety of strategies that can be used to reach the target audience. Promoting the program at least 2-3 weeks before the start of the program is ideal. This includes sharing information through social media platforms, various stakeholders, and by word of mouth (see Appendix C).

IN-PERSON OUTREACH STRATEGIES

Strategy	Details	Examples
<i>Mail outreach materials</i>	Mail outreach materials (i.e. brochures, flyers, etc.) to community members and stakeholders.	Community member's homes, apartment complexes, senior homes, etc.
<i>Reach out to existing clientele through established activities/ programs</i>	Inform community members about upcoming programs that focuses on enhancing understanding of healthcare topics. Attract participants by offering promotional items and provide materials.	Senior programs, LIHEAP, ESL, Congregate Meal programs, Homemaker program, etc.
<i>Tabling at community events</i>	Share information and resources through community events.	Drive-thru and in-person health fairs, community events, flu shot clinics, food drives, county fairs, farmers' markets, food pantry, Back to School drives, etc.
<i>Post or provide media at local businesses</i>	Some businesses have bulletin boards or areas where information can be provided. Post outreach materials or leave materials for community members to pick up as they gather or visit these locations.	Banks, libraries, ethnic grocery store, ethnic restaurants, bakeries, restaurant, hair salons, African braiding salons, Church, Mosque, etc.
<i>Providing information in waiting rooms</i>	Can have information posted in waiting rooms or discuss with clients when they go to an appointment.	Clinic waiting rooms, organization waiting rooms, lines to pick up food/resources, etc.

VIRTUAL OUTREACH STRATEGIES

Strategy	Details	Examples
Distribute virtual flyers	Messaging applications, social media messages, can be used to share virtual flyers but will often require the flyer in .png or .jpg. • Posting on social media accounts of upcoming community events along with a multilingual flyer. • Content, such as fun facts and stories of participants, engage and motivate people to join the program.	WhatsApp, WeChat, Facebook, Twitter, Instagram, blogs, email, newsletters, etc.
Share educational webinars and videos	Make your own or use educational webinars, PSAs, or videos to get community members thinking about your health topic. Consider the possible importance of this information coming from doctors vs other community members vs spiritual leaders in the community.	Seminars, presentations, workshops, YouTube, TikTok, etc.
Collaborate with local groups and organizations to share virtual media	Ask groups, organizations, faith-based organizations that serve the target population to share within their networks (through social media, newsletters, listservs, etc.).	Churches, Mosque, temple, book club, student or professional groups, community-based organizations, institutions, gyms, libraries, hair/beauty salons, etc.
Share information by phone	Utilize existing phone records to call and share information with community members.	Those with limited technological resources or capabilities, such as seniors, may be best reached by phone.

RECRUIT AND ENROLL PARTICIPANTS

Once CHAs are trained, they can help with recruitment and enrolling participants into the program. Within the CARDIO program, recruited individuals are those who have expressed interest in the program. He or she may have attended an informational session introducing the program or may have received news of the program through various outreach strategies.

Enrolled individuals are those who have completed the formal enrollment process for program participation, including any required health screening, surveys and consent form.

“I learned how to release my stress through my activities. For instance, I exercise and do yoga. I do meditation and sleep better now. Also, a healthier eating habit helps my heart health, too.”

WEN FANG (CARDIO participant)

BEST PRACTICES

Begin outreach at least 2 weeks before the start of the program.

Social media posts generate more views when an image is used.

Enroll more participants than required to meet your goal to account for attrition.

Offering multiple classes that occur at different times during a single period can provide more options for participants that accommodate their schedules, but also ensures that, especially if the same facilitator teaches all classes, the same content is taught across all programs within a week.

EDUCATION STRATEGIES

Delivering the curriculum can happen in a variety of settings. In-person CARDIO classes were held at locations convenient for the community, such

as a classroom at a local organization. One way to recruit and educate community members is to invite and incentivize those who already attend a regular program or event to extend their time at the event to join an additional program.

Education can also be delivered virtually (See 'Remote Learning Accommodation'). Various videoconferencing and messaging applications can be utilized to educate the community. When the CARDIO program transitioned to virtual classes, we incorporated additional interactive activities for facilitators to engage with community members and encourage lifestyle behavior changes. Conducting classes virtually also allows for practical exercises, such as asking participants to take out their favorite food and look at the nutrition label. This also allows participants to engage from wherever they are and feel comfortable participating in, for example, an exercise video. Personal experiences shared by participants and facilitators also encourages participants to make changes and hear practical advice from individuals who are just like them.



CARDIO participants engage in an in-person class



BEST PRACTICES

Community leadership in program planning and implementation makes the program more relatable, which increases engagement and impact.

Incorporate multiple in-class activities, demonstrations, and discussions to enhance learning experience. The more tactile the learning experience, the more the material is retained.

Creating a group chat or a chat room for participants on a preferred messaging application can be a great way to have participants engage with one another to encourage heart healthy lifestyle behaviors throughout the week.

Incorporate more discussion questions and “what would you do” examples to curricula to make it more engaging and increase retention

The ‘train-the-trainer’ model is a good tool to engage existing CHAs to coach new CHAs to teach educational materials.

PARTICIPANT RETENTION

Once you have participants enrolled, the key is keeping everyone engaged. This can be accomplished through a variety of means. The most effective, however, is some sort of gift card or material incentive. For the CARDIO program, we do both.

At the start of the CARDIO program, welcome packets are handed/mailed out to enrolled participants. These contain handouts for each class, and for virtual classes it also included items for at-home screening, such as measuring tapes, weight scales, and an instructional guide for screening measures. Participants are also given health-related incentive items (i.e. pedometers, water bottles, etc.) throughout the program to promote healthy behaviors.

Upon completion of the program, in-person participants received a completion certificate at their final class.

Virtual participants were given a small palm card that is designed to facilitate a heart health conversation with a health care provider (See Appendix F). The small card also includes some helpful tips and space to write down personal health concerns to discuss.



Participants were given gift cards as an incentive for participating in the CARDIO program. Specific program elements were connected to an incentive in order to retain participant engagement over time and encourage them to complete the entire 6-month program. Three key program activities were incentivized:

01

Completion of at least 4 out of 6 weekly program sessions

02

Completion of the first follow-up screening approximately 3 months after the program

03

Completion of the second follow-up screening approximately 6 months after the program

These incentives were distributed as either a gift card or e-gift card. The form of incentive was determined by the community organizations distributing them and the preference of the recipient. For example, some participants who attended the virtual program preferred an e-gift card while many attending the in-person classes received a gift card.

BEST PRACTICES

Connecting participants with health care resources can give them the information and access to medical services they need to improve their cardiovascular health. This can help participants take control of their health beyond the program and receive support for managing other chronic conditions.

Combining incentives for program completion with a follow up evaluation further incentivizes participants to complete both.

Determining ahead of time what method will be used to distribute the incentives can reduce the need to contact participants multiple times later on in the program. Either have community organizations choose one type of incentive (e.g. gift card, e-gift card), or ask participants to choose an option for all their incentives related to the program when they enroll.

Program Evaluation

Every good program has one thing in common: it evolves. A program like this will look different with each round of classes, through each new participant, in each new setting, and especially for each community. The key is to remain flexible to accommodate for the community in an ever-changing space. As much as we are willing to teach, we must also be willing to learn, grow, and adapt.

SURVEY DEVELOPMENT

To help evaluate progress, program surveys are collected at different stages as participants move through the program. We administer surveys at enrollment, before and after each class, and at each follow-up screening approximately 3 and 6 months after the program. Surveys can be utilized

for a variety of evaluation purposes, for example, pre and post surveys for every class measure change in knowledge and provide insight into what information is being retained and where there are gaps.

Additionally, screenings track biometric data. During in-person classes, the CARDIO program collected blood pressure, BMI, cholesterol and A1c at baseline, 3 months, and 6 months after the program. Through adaptation to the virtual program, self-reporting measures were utilized, including Waist to Hip Ratio (WHR) and Body Mass Index (BMI). WHR is the ratio of your waist measurement compared to your hip measurement. Instructional guides are included in welcome packets for participants on how to report measurements.



BEST PRACTICES

Identify the information you want to know and what might be relevant to your program. Find evidence-based measures for these or create your own if there are none.

For at-home screenings, be sure to offer all supplies necessary for participants to complete screenings on their own, including instructional guides.

SURVEY COLLECTION PROCESS

Survey collection can be time consuming, especially virtual survey collection. Utilizing scripts for collecting screening surveys can help cut time and ensure CHAs are more precise and culturally sensitive when communicating with participants, for example, asking “what language would you prefer to communicate in?” rather than “do you speak English?” (see Appendix D). Additionally, utilizing virtual functions such as online polls, chats or messaging groups, or other features can ensure surveys are completed in a timely manner.



“After the CARDIO class, I learn that taking care of my heart is very important. I put less salt in my meal and eat more unsaturated fat food. I also started to take a walk four times a week for an hour, and I already lost 2 pounds!”

WU YI (CARDIO participant)

When there are many participants and multiple classes, it is important to track data and keep it organized. We used an online database and spreadsheet to organize, track, and store data. Below is the CARDIO step-by-step guide of the survey collection process.

I. Enrollment and baseline screening survey: This survey is collected to enroll participants into the CARDIO classes.

a. Complete Enrollment Survey

- i. Survey may include identifiable information about the participant, such as: name, date of birth, gender, phone number, home address, and email. This information helps with contacting the participant for follow-ups and mailing class materials.*
- ii. Go through the survey questions one at a time and answer any questions the participant may have.*

II. Program intervention pre- and post-surveys: This survey is collected to understand participants health habits and knowledge about heart health topics before and after the program.

a. Complete the intervention pre-survey

- i. Survey may include questions about eating habits, exercising, heart health, lifestyle changes the participant hopes to achieve by completion of the program, and self-reported health.*

- ii. Go through the questions one at a time or have a conversation with the participant that incorporates the questions.*

III. Session pre- and post-surveys: These brief surveys are collected before and after each class to evaluate change in knowledge.

- a. Complete session pre- and post- surveys appropriately designed for each class topic. Ensure the pre-survey is completed before a participant attends the class.**

IV. Second Screening:

- a. Complete screening survey**
- b. Collect biometric/at-home screening measurements, such as hip and waist circumference**
 - i. Provide directions for completing these measurements, particularly if self-reported.*
- c. Confirm participant's method of receiving their incentive (i.e. via email, mail, etc.)**

V. Final Screening:

- a. Complete screening survey**
- b. Collect biometric/at-home screening measurements, such as hip and waist circumference**
 - i. Provide directions for completing these measurements, particularly if self-reported.*
- c. Confirm participant's method of receiving their incentive (i.e. via email, mail, etc.)**



Another helpful method of data collection is participant stories. This includes stories about how the program has impacted a participant and/or their family and friends. These are useful for outreach and understanding the anecdotal impact of the program beyond survey results. This may provide more depth of understanding the impact of the program and may bring to light any unexpected affects of the program.

- a. Create and utilize a participant story form to collect the story or set a time to listen to a participant's story. Document if a participant declines to share a story.
- b. Send the participant a summary of their story and get written consent (email, text, verbal) to post their stories. Ideally, a consent form should be signed if planning to share the story publicly.

- c. A story with a picture is more engaging. If participants are comfortable, ask for a picture or take pictures during the class(es). Participants should complete a consent for the images to be shared publicly.

See our CARDIO participant stories in the 'CARDIO Program Results' section below.

BEST PRACTICES

Survey collection via phone or messaging application may be most applicable and easiest for participants with limited technological resources and/or capability.

Follow a script for precision and culturally sensitive survey collection.

CARDIO Program Results

06

The CARDIO program was held from 2018 through 2021. The program reached South Asian and Chinese community members, primarily born outside of the United States. Majority of participants were 50 and older, female, and had limited English proficiency. A breakdown of the data specific to each of these communities can be found below.

CUMULATIVE RESULTS AT A GLANCE



NEARLY ALL PARTICIPANTS
INCORPORATED AT LEAST 1 HEART HEALTHY
BEHAVIOR INTO THEIR DAILY ROUTINE

395
TOTAL
PARTICIPANTS



140 PARTICIPANTS TALKED
TO THEIR DOCTOR ABOUT
THEIR HEART HEALTH



1134 POUNDS
WERE LOST



MAJORITY
OF PARTICIPANTS ATE MORE
FRUITS AND VEGETABLES DAILY



39%
OF PARTICIPANTS
EXERCISED MORE
DAYS OF THE WEEK

"I shared what I learned from the CARDIO curriculum about heart, diabetes, and salt with my family and friends. Being able to get to know fellow classmates was great and I enjoyed learning from them. I lost weight which was a huge change and am feeling physically good and taking steps for better heart health."



SUNITA (CARDIO participant)

SOUTH ASIAN COMMUNITY

From November 2018 to February 2020, 125 South Asian community members completed the CARDIO program in-person. From June 2020 to June 2021, 48 South Asian community members completed the CARDIO program virtually.

SIX MONTHS AFTER TAKING THE CARDIO CLASSES...



**36% EXERCISED MORE
DAYS OF THE WEEK!**



**59% ATE MORE FRUITS
AND VEGETABLES DAILY!**



**WHEN THE PROGRAM BEGAN, 87% WERE OVERWEIGHT.
AFTER 6 MONTHS, A TOTAL OF 386 POUNDS WERE LOST!***

*of 103 participants with weight and height reported at baseline and final screenings



CHINESE COMMUNITY

From December 2020 to September 2021, 222 Chinese community members completed the CARDIO program. All 222 incorporated at least 1 heart healthy behavior to their daily routine!

AFTER 6 MONTHS...



40% EXERCISED
MORE DAYS
OF THE WEEK!



62% ATE MORE
FRUITS DAILY!



59% ATE MORE
VEGETABLES DAILY!

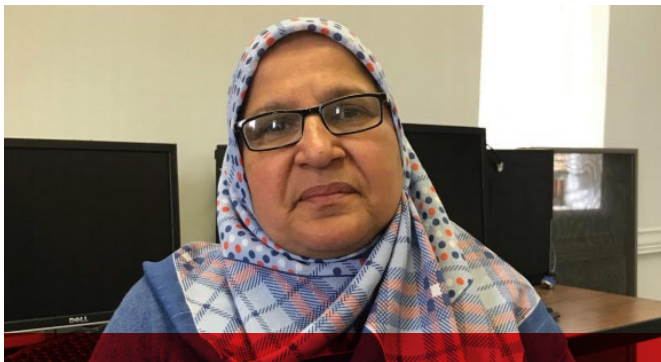


WHEN THE
PROGRAM BEGAN,
131 PARTICIPANTS
WERE OVERWEIGHT.
AFTER 6 MONTHS,
OVER 100
PARTICIPANTS
LOST WEIGHT FOR
A TOTAL OF **748**
POUNDS LOST!



PARTICIPANT STORIES

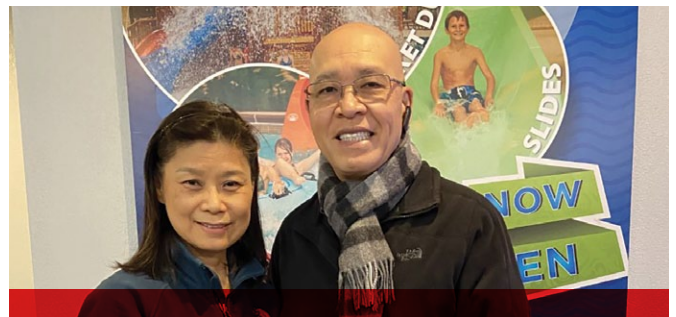
Shehnaz was one of the first participants in the CARDIO Program. She said she “wanted to gain more knowledge about heart disease.” At the end of the 6-week session, she said she really loved the course. She enjoyed how the class was taught by the teacher. Shehnaz became one of the Urdu/Hindi interpreters for the class and enjoyed being able to help other students understand the material. She shares what she’s learned with her neighbors and hopes to help with interpretation in future CARDIO classes.



Minlan learned about heart healthy habits and shared them with her whole family! She shared ways to lower blood pressure with her in-laws, encouraged her husband to stop smoking, and now exercises with her son to keep healthy.



Karen helped to coordinate CARDIO program classes in the Chinese community. She was inspired to help the community learn more about leading heart healthy lives because of her own family’s experiences. “I wish that our family had more information about preventive cardio measures. This would have helped my husband to be aware of the problem earlier and he might have avoided an open-heart surgery.”



After taking the CARDIO program classes, Shikha has felt more in control and committed to her community’s health needs. She now exercises more frequently and pays attention to what she eats. During each class, the WhatsApp platform made it possible for Shikha to walk briskly outdoors while participating in class. To make exercise more fun, she took virtual dance classes and learned some Bhangra moves! Shikha enjoys sharing what she learned in class with her friends and family on social media to promote a heart healthy lifestyle.

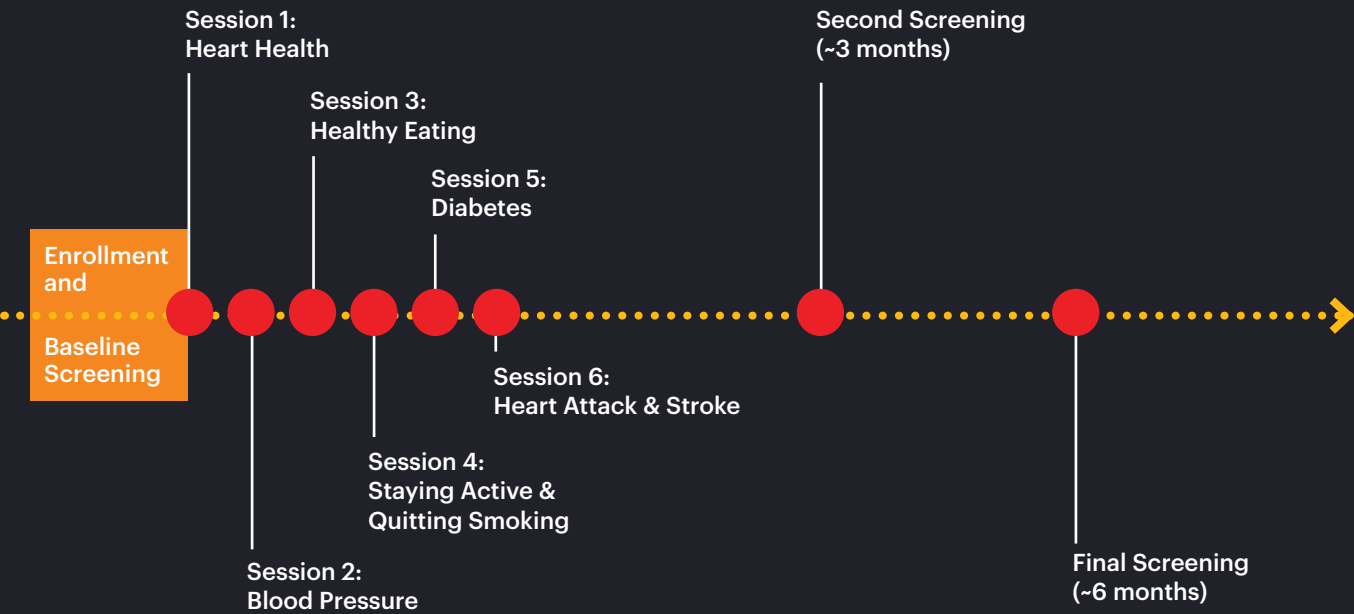


Appendices

APPENDIX A. LIST OF ACRONYMS	
CHA	Community Health Ambassador
CVD	Cardiovascular Disease

CBO	Community-Based Organization
BMI	Body Mass Index
WHR	Waist-to-Hip Ratio

APPENDIX B. TIMELINE OF THE CARDIO PROGRAM



APPENDIX C. SAMPLE OUTREACH FLYERS IN ENGLISH, HINDI, URDU, AND SIMPLIFIED CHINESE

Did you know ?

South Asians are 4x more likely to develop heart disease than the general population.

CARDIO is a free online program that focuses on lifestyle changes to lead heart healthy lives !

You will learn how to :

- Better take care of you and your family's health.
- Reduce your risk of diabetes and heart diseases.
- Make healthy lifestyle changes.

6 week program
Meet online once a week on Whatsapp

Receive a total of \$75 for completing program & follow up surveys

Classes offered in English, Hindi & Urdu

Register for the CARDIO program today!
Classes starting the week of January 4th, 2021

क्या आपको पता था?

सामान्य जनता की तुलना में दक्षिण एशियाई लोगों की हृदय रोग से ग्रसित होने की संभावना 4 गुना अधिक होती है।

CARDIO एक नि:शुल्क ऑनलाइन कार्यक्रम है जो स्वस्थ हृदय के साथ जीवन जीने हेतु जीवन-शैली में बदलावों पर ध्यान-केंद्रित करता है।

आप सीखेंगे कि कैसे:

- अपने और अपने परिवार के स्वास्थ्य का बेहतर ढंग से ध्यान रखें।
- स्वयं के मधुमेह एवं हृदय रोग से ग्रसित होने के खतरे को कम करें।
- जीवन-शैली में स्वास्थ्यवर्धक बदलाव करें।

6 सप्ताह का कार्यक्रम
(WhatsApp पर सप्ताह में एक बार मिलें)

सहभागियों को कार्यक्रम को पूरा करने और सर्वेक्षणों में भाग लेने के लिए कुल \$75 प्राप्त होंगे।

अंग्रेजी, हिंदी और उर्दू में व्याख्यान प्रदान किए जाएंगे।

आज कार्डियो कार्यक्रम के लिए रजिस्टर करें!
कार्डियो कक्षाएं 4 जनवरी 2021 के सप्ताह से शुरू होंगी

کیا آپ جانتے ہیں؟

جنوبی ایشیائی لوگوں کا عام لوگوں کی نسبت دل کی بیماری میں مبتلا ہونے کا امکان چارگنا زیادہ ہوتا ہے۔

کارڈیو ایک مفت آن لائن پروگرام ہے جس کا کام دل کی صحت مند زندگی کے لئے طرز زندگی میں تبدیلی پر زور دینا ہے!

آپ یہ سیکھیں گے کہ کس طرح

- اپنی اور اپنے کنبے کی صحت کا بہتر خیال رکھا جائے۔
- اپنا ذیابیطس اور دل کی بیماریوں میں مبتلا ہونے کا خطرہ کم کیا جائے۔
- طرز زندگی میں صحت مندانہ تبدیلیاں لائی جائیں۔

انگریزی ، ہندی اور اردو میں کلاسوں کی پیشکش کی جاتی ہے۔

پروگرام اور فالو اپ سروسز کی تکمیل کے عوض شرکا کو 75 ڈالر مبلغ ملیں گے

چھ ہفتوں کا پروگرام (ہفتے میں ایک بار ملاقات کریں)

کارڈیو پروگرام کے لئے اندراج کرائیں!
کلاسز 4 جنوری 2021 کے ہفتے سے شروع ہوں گی

您知道吗？

与其他种族相比，正常体重的亚裔美国人更容易患心脏病！

心血管意识、认识饮食和锻炼选择整合 (Cardiovascular Awareness, Recognizing Diet and Integration of Exercise Options, CARDIO) 是一门免费的在线课程，专注于改变生活方式，使人过上心脏健康的生活！

您将学习如何：

- 更好地照顾自己和家人的健康。
- 降低患糖尿病和心脏病的风险。
- 为健康的生活方式作出改变。

为期 6 周的课程！
每周一次
通过 Zoom 授课。

完成课程与
各项后续调查可获得
总计 75 美元。

使用普通话授课。

立即注册 CARDIO 课程！
如需了解更多详情，请致电 312-328-1188 或发送电子邮件至 Karenlee@puitak.org 与李施美娟女士联络

APPENDIX D. SAMPLE SCRIPTS AND GUIDES FOR SCREENINGS

Script for Cardio Program Enrollment

Hello

I am (your name) from Asian Health Coalition.

Is this (first name, last name)?

Do you prefer to communicate in English, Urdu or Hindi?

We are contacting you in regard to the CARDIO program. You indicated your interest for this program through (say community partner name). We are calling you to fill the survey before starting the online class next week (class date and time). This will not take more than 15 minutes to complete. Do you have time to complete this survey now?

If no Ask for a suitable time to call back.

If yes *I would first like to say thank you for taking the time to talk to me today.*

First, I would like to re-confirm your name and please tell us your date of birth.

Ask CARDIO Enrollment Survey questions and Pre-intervention/survey session 1 questions.

As part of the follow up, we are collecting self-report of your hip and waist measurement using the measuring tape. Do you have a measuring tape at home?

Provide next steps to participants. Here is my phone number XXX-XXX-XXX if you have any questions. We look forward to meeting you virtually in class.

Script for Second Screening Follow Up

Hello

I am (your name) from Asian Health Coalition.

Is this (first name, last name)?

Do you prefer to communicate in English, Urdu or Hindi?

We are contacting you in regard to the CARDIO program. You indicated your interest for this program through (say community partner name). We are calling you to fill the survey before starting the online class next week (class date and time). This will not take more than 15 minutes to complete. Do you have time to complete this survey now?

If no Ask for a suitable time to call back.

If yes Complete the **Second follow up survey**.

As part of the follow up, we will now complete self-report of your hip and waist measurement using the measuring tape. Do you have a measuring tape at home?

Do you feel comfortable for me to assist you measure your hip and waist by providing easy to follow instructions over the phone? If not, you can measure your hip and waist and call me back today or later this week to give me the numbers.

If participant does not have a measuring tape, let them know that we are in the process of sending a packet in the mail including a measuring tape.

AHC Staff: Please follow the instructions below as mentioned in the article of Healthline.¹ **Note: The Self-Report Measurement handout (located in Share drive) can be used as well.**

- *Stand up straight and breathe out. Use a tape measure to check the distance around the smallest part of your waist, just above your belly button. This is your waist circumference.*
- *Then measure the distance around the largest part of your hips — the widest part of your buttocks. This is your hip circumference.*

We are thinking about setting up for the optional additional free screenings once the clinics reopen. Is this something you would be interested in?

If yes Let participant know that we will be in touch soon with next steps for free screening.

If no Thank them for feedback.

*Lastly, we would like to **confirm your address to send the incentive**. Thank you again for your time.*

Next steps for AHC staff:

- Input the data into Follow up Excel sheet for tracking processes; mark appropriate columns such as: 2nd (3 month) follow up, date, your name.
- Make a note in the spreadsheet if participant has to get back with measurement numbers/figures
 - Enter follow up surveys into REDCap

Script for Final Screening Follow Up

Hello

I am (your name) from Asian Health Coalition.

Is this (first name, last name)?

Do you prefer to communicate in English, Urdu or Hindi?

We are contacting you regarding the CARDIO class that you participated in (date) with (organization) and that we are conducting a Final follow up survey. Also, we would like to check in with you and see how you're doing. Do you have time to take the follow up survey now?

If no Ask for a suitable time to call back.

If yes Complete the **Final follow up survey**.

As part of the follow up, we will now complete self-report of your hip and waist measurement using the measuring tape. Do you have a measuring tape at home?

Do you feel comfortable for me to assist you measure your hip and waist by providing easy to follow instructions over the phone? If not, you can measure your hip and waist and call me back today or later this week to give me the numbers.

If participant does not have a measuring tape, let them know that we are in the process of sending a packet in the mail including a measuring tape.

AHC Staff: Please follow the instructions below as mentioned in the article of Healthline.¹ **Note: The Self-Report Measurement handout (located in Share drive) can be used as well.**

- *Stand up straight and breathe out. Use a tape measure to check the distance around the smallest part of your waist, just above your belly button. This is your waist circumference.*
- *Then measure the distance around the largest part of your hips — the widest part of your buttocks. This is your hip circumference.*

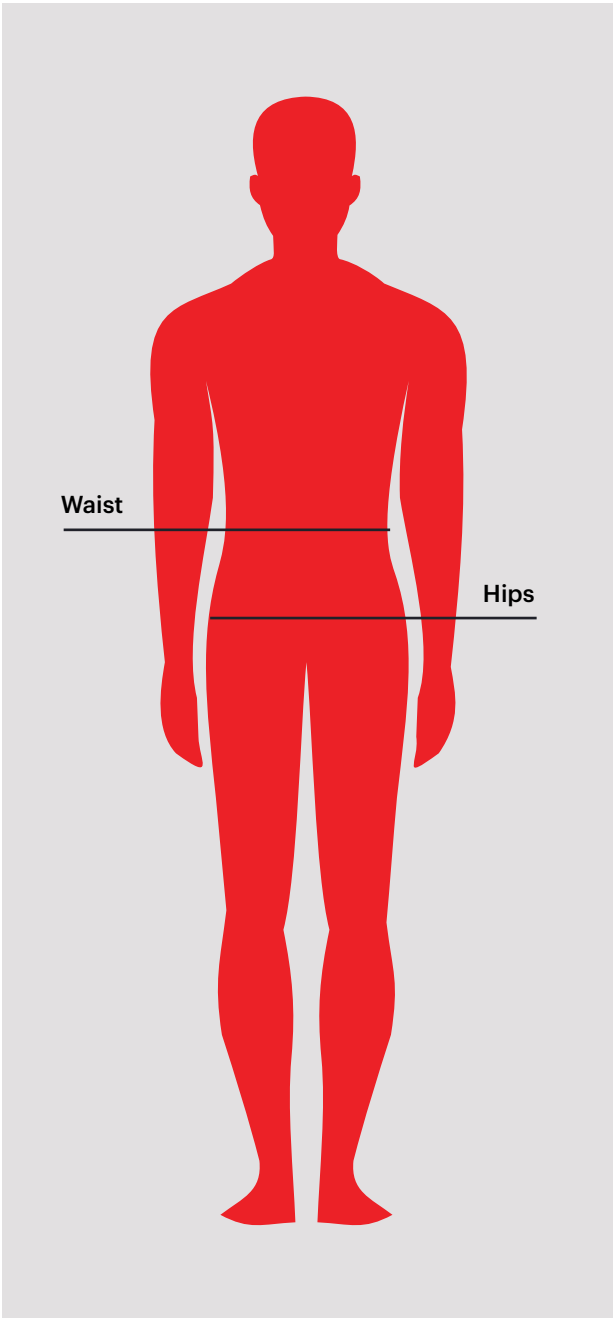
*Lastly, we would like to **confirm your address to send the incentive**. Thank you again for your time.*

Next steps for AHC staff:

- Input the data into Follow up Excel sheet for tracking processes; mark appropriate columns such as: Final (6 month) follow up, date, your name
 - Make a note in the spreadsheet if participant must get back with measurement numbers/figures
- Enter follow up surveys into REDCap

How To Measure The Area Around Waist and Hips:

- 1. Stand up straight and breathe out.
- 2. Find the narrowest part of your waist, just above your navel. An easy way to find your waist is to bend your body to one side and notice where on the side of your body that creases. You will measure around this area.
- 3. With one hand, hold the beginning of the tape measure in place on the front side of your body. With the other hand, wrap the tape measure around your body until it overlaps with your starting point. Make sure every part of the tape is parallel to the floor as it wraps around your body.
- 4. Record the number you see on the tape where your hands meet. This is your waist measurement.
- 5. Then find largest part of your hips — the widest part of your buttocks. We will measure around this area to find your hip measurement.
- 6. Measure around your hips by repeating step 3 on this area.
- 7. Record the number you see on the tape where your hands meet. This is your hip measurement.
- 8. Submit your measurement recordings to CAHE. CAHE will calculate your WHR (waist/hip ratio).



	Date	Date	Date
Waist (cm or in)			
Hip (cm or in)			

APPENDIX E. SAMPLE SOCIAL MEDIA POSTS FOR THE CHINESE AND SOUTH ASIAN POPULATIONS



APPENDIX F. SAMPLE PALM CARD



CARDIO
—❤️—

**Heart-related topics
to discuss with your doctor**

- Blood pressure
- Weight
- Diabetes
- Heart Disease
- Stress
- Healthy eating habits



My Top 3 Health Concerns
Use this space to write concerns to show/discuss with your doctor.

- _____
- _____
- _____

Other members of your healthcare team, such as nurses, dietitians, community health workers, mental health professionals, and pharmacists can be a good source of information, too!

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THE CARDIO PROGRAM TOOLKIT

Cardiovascular Awareness Recognizing
Diet and Integration of Exercise Options



**Center for Asian
Health Equity**

Asian Health
Coalition
University of
Chicago Medicine