IRB Study Number: 20181032
Version 8, Date: 07/16/2021

Full Protocol Title: Preventing Cardiometabolic Disease in HIV-Infected Latino Men through a Culturally-Tailored Health Promotion Intervention

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1) Protocol Title

Preventing Cardiometabolic Disease in HIV-Infected Latino Men through a Culturally-Tailored Health Promotion Intervention

2) IRB Review History*

This protocol has not been submitted for review by an external IRB.

3) Objectives*

This study will address the following specific aims and test the following primary hypotheses:

Aim 1 (primary outcome): To evaluate the feasibility of recruitment, assessment procedures, retention, acceptability, and implementation of HOLA in a sample of midlife and older Latinos living with HIV.

Aim 2 (secondary outcome): To identify modifications needed in the design of a larger, confirmatory randomized controlled trial.

Aim 3 (secondary outcome): To explore changes in cardiometabolic risk factors (waist circumference, dyslipidemia, hypertension, and glucose), psychosocial functioning (depression and anxiety severity, social support), and health-related quality of life in a sample of midlife and older Latinos living with HIV enrolled in the HOLA health promotion intervention.

In addition, a career development and mentoring plan has been developed, comprised of expert mentorship, scholarly didactics and seminars, hands-on experience, as well as measurable productivity, including peer- reviewed manuscripts and an NIH grant application.

4) Background*

Midlife and older Latinos living with HIV have been disproportionately affected by the epidemic and experience a compounded health disparity that has deepened over time. First, combination antiretroviral therapy (ART) has increased the longevity of people living with HIV spurring increased rates of hyperlipidemia, insulin resistance, and lipodystrophy and subsequent development of metabolic syndrome (MetS). Second, midlife Latinos with HIV have a greater prevalence of MetS and diabetes compared to their non-Latino White counterparts. Taken together, these data underscore the public health importance of increased efforts to redress the compounded and unequal burden of HIV, MetS, and diabetes shouldered by midlife and older Latinos. These health disparities are largely related to lifestyle and are either preventable or amenable to early detection or intervention. Despite existing resources to deliver an intervention to reduce this compounded health disparity, there is little information on the effects of health promotion interventions on indices of cardiometabolic risk in midlife and older Latinos living with HIV.

The Happy Older Latinos are Active (HOLA) intervention is an innovative health promotion program that is uniquely tailored to meet the diverse

needs and circumstances of midlife and older Latinos living with HIV. HOLA builds on prior research using health promotion to prevent depression and anxiety in older Latinos. In the present context, HOLA uses a lay community health worker (CHW) to lead a health promotion program in order to reduce cardiometabolic risk and improve psychosocial functioning and health-related quality of life in midlife and older Latinos living with HIV. Such an approach could appeal to midlife and older Latinos living with HIV as a nonstigmatizing and culturally acceptable intervention. HOLA addresses multiple concerns that are prevalent in this community (cardiometabolic risk, psychological distress). In addition, cultural values and beliefs were included in the formative and development phases of the intervention to ensure that the different socio-cultural influences that have a role in the health of Latinos were incorporated. Thus, HOLA is the optimal choice to address an urgent medical and public health issue, and one that is rapidly growing. The objectives of this pilot study are two-fold: (1) to evaluate the feasibility and acceptability of HOLA among HIV-infected Latinos aged 50 and older and (2) identify modifications needed in the design of a larger, ensuing hypothesis testing study. HOLA, which is informed by Behavioral Activation and Social Learning theory is a CHW-led, multicomponent, health promotion intervention consisting of: (1) a social and physical activation session; (2) a moderately intense group walk led by a CHW for 45 minutes, 3x/week for 16 weeks; (3) pleasant events scheduling. The proposed pilot study will recruit and enroll 18 community dwelling Latinos living with HIV aged 50+. Participants will be assessed at three time points (baseline, post intervention, and 3 months post intervention) on measures of cardiometabolic risk factors (waist circumference, dyslipidemia, hypertension, and glucose), psychosocial functioning, and health-related quality of life. Consistent with recommendations from biostatistical workgroups funded by NIH, this pilot study is not powered to test a hypothesis. Rather, this pilot study is a requisite initial step in exploring an innovative application of the HOLA health promotion intervention.

5) Inclusion and Exclusion Criteria*

Inclusion Criteria:

The following conditions must be met for study eligibility:

- are Latino (self-identified);
- are age 50+;
- are male;
- are HIV infected but are virologically suppressed (viral load <200 copies/mL);
- volunteer informed consent
- have medical clearance by a physician;
- expect to stay in Miami for the next 6 months; and

- have documented risk of cardiometabolic disease.

Exclusion Criteria:
Individuals meeting any of the following criteria will not be eligible to participate in the study:

- have a diabetes diagnosis;
- at baseline meet criteria for current major depressive disorder or generalized anxiety disorder;
- meet criteria for current alcohol or other substance abuse disorders;
- have a lifetime history of bipolar disorder or other psychotic disorder;
- have a diagnosis of any neurodegenerative disorder or dementia (Parkinson's disease, Alzheimer's, vascular, frontotemporal dementia, etc.) or significant cognitive impairment as indicated by a Mini Mental Status Exam score <24;
- have contraindications to physical activity outlined in the American College of Sports Medicine standards; (g) have high suicide risk i.e., intent or plan to attempt suicide in the near future (a response of "yes" to questions 3, 4, and/or 5 on the Paykel Questionnaire);
- are unable to complete 10 m walk test;
- currently residing in a nursing or group home;
- have a terminal physical illness expected to result in the death within one year;
- have an acute or severe medical illness that precludes them from safely participating in a health promotion intervention (e.g. progressive, degenerative neurologic disease, such as Parkinson's Disease, multiple sclerosis, ALS; severe arthritis or orthopedic condition that would prevent participation in a physical activity program; lung disease requiring either oral or injected steroids, or the use of supplemental oxygen; New York Heart Association Class III or IV congestive heart failure, clinically significant aortic stenosis, history of cardiac arrest, use of a cardiac defibrillator, or uncontrolled angina; renal disease requiring the use of dialysis; cancer being actively treated with radiation or chemotherapy; myocardial infarction, CABG, or valve replacement within the past 6 months; serious conduction disorder, such as 3rd degree heart block; uncontrolled arrhythmia; pulmonary embolism or deep venous thrombosis within past 6-months; uncontrolled diabetes with recent weight loss, diabetic coma or frequent insulin reactions; stroke, hip fracture, hip or knee replacement, or spinal surgery in the past 6 months; receiving physical therapy for gait, balance, or other lower extremity training; severe, uncontrolled hypertension -systolic blood pressure >200 mmHg and/or diastolic blood pressure >110 mmHg); or
- are currently taking antidepressant medications in doses indicated for weight reduction.

This study will not include women in that the specific research questions are targeted toward males. This study will specifically target Latinos. Individuals from other ethnic backgrounds are excluded as the study intervention is specifically tailored to address and target the specific needs and preferences of older Latinos with risk of cardiometabolic disease. This study is specific to only Latino males and will only report data on Latino males; findings from the study are intended to only be generalizable to Latino males. Both Black and White Latino males will be included in the study. We are not powered to detect differences between racial groups of Latino men. Previous research indicates that the outcomes in this study along with engagement with the intervention suggests no differences between racial groups of Latino males; no significant differences have been found in any outcomes in HOLA pilot data. We will use respondent self-report or self-identification to collect data on ethnicity and race. Though this application talks of racial/ethnic disparities and refers to Latino as an ethnicity, we are aware of the limitations of this construct. We acknowledge that ethnicity is a social construct and that Latinos are not a homogeneous, monolithic group even though the U.S. Census definition classifies them into one uniform ethnicity. Also, many racial/ethnic differences that have been identified in previous research are in fact confounded by socioeconomic status (SES). However, even though SES is indeed a central determinant of health status and overlaps with the concept of race, SES does not account for all racial health disparities.

6) Number of Subjects*

18 older Latinos age 50+ will be enrolled.

7) Study-Wide Recruitment Methods*

Recruitment procedures will protect participant confidentiality.
We will use a multi-faceted recruitment strategy that has been successfully implemented at the University of Miami/Jackson Memorial Medical Center (UM/JMMC) Adult HIV Outpatient Clinic consisting of advertisements, informing clinic staff of the study, and direct recruitment by the CHW. The CHW (a UM employee who is to be determined) will coordinate with the Clinical Sciences Core and the Behavioral/Social Science & Community Outreach Core of the Miami Center for AIDS Research (CFAR). The CFAR Clinical Sciences Core (Core C) provides state-of-the-art facilities for implementation of clinical studies, clinical research and services including sample and data collection. The location of Core C next to the Special Immunology clinics allows recruiting participants in an efficient manner on the same day of clinic visit. Behavioral/ Social Science & Community Outreach Core (Core E) provides CFAR investigators with consultation and resources to expand behavioral clinical studies. HIV-infected patients receive

primary care from their HIV care providers at the UM/JMMC Adult HIV Outpatient Clinic. The CHW will work with Clinic staff to educate them about the study as well as the inclusion/exclusion criteria. Clinic staff will identify potential participants through the electronic medical records and matched with the weekly clinic census. Clinic staff will introduce the CHW to potential participants during their regularly scheduled HIV care visit at the Clinic. The CHW will describe the study to the potential participant. If he is interested, then the CHW will go over the consent form. After the participant has signed the consent form, he will be asked to sign HIPAA Research Authorization – Form B, which authorizes study personnel to access the participant's protected health information, specifically the cardiometabolic parameters of interest, HIV/AIDS status, and viral load. No other individually identifiable health information will be shared with study investigators.

In addition, we will also collaborate with another study, the Clinic Registry Project (IRB#20160911), which serves as a consent to contact database, to contact eligible participants. They will provide us with contact information for participants in their study who have consented to be contacted by other studies. When contacting participants, the CHW will follow the phone script for calling UHealth consent to contact participants that has been tailored to this study.

8) Procedures Involved*

Participants will be assessed at three time points (before starting the study, 4, and 7 months after the first interview) on measures of cardiometabolic risk factors (waist circumference, dyslipidemia, hypertension, and glucose), psychosocial functioning, and health-related quality of life.

All participants will read and sign an informed consent document and a HIPAA Research Authorization – Form B approved by the University of Miami Institutional Review Board (IRB). They will initially be provided with a verbal summary of the study and for those who appear to have problems reading the consent form it will be read aloud. Participant payments will be graduated. Participants will receive $15 on the first visit, $25 on the second visit, and $35 on the third visit (total of honoraria = $75).

Prior to starting the baseline assessments, blood draws will take place at the UM/JMMC Adult HIV Outpatient Clinic. Study staff will obtain initial HDL-C, LDL-C, triglycerides, insulin, and HbA1c levels via review of the electronic medical records. Trained and certified research assistants (RAs) who have at least a bachelor's degree will conduct all assessments in private offices at the UM/JMMC Adult Outpatient HIV Clinic, at a private interview room at the CTRS located on the 7th floor of the Don Soffer Clinical Research Center, or the participant's home. To ensure privacy in the home, we will conduct the interview in a private room with a door of the participant's choosing away from any common areas. In the event that there are other people in the house, the door can be closed to maintain privacy. In the event that an in-person interview is not feasible then the interview will be

conducted over the telephone. At 4 and 7 months after the initial interview, fasting blood samples will be drawn via venipuncture and stored at 4ºC until analysis. HOMA will be calculated, providing a measure of insulin resistance. Study measures will be administered after the blood draws.

Assessment Measures

Cardiometabolic Risk: list of current medications, waist circumference, total cholesterol, HDL-C, LDL-C, triglycerides, blood pressure, and HbA1c, will be used to measure cardiometabolic risk.

Dementia Screen: The Mini Mental Status Exam (MMSE) will be used to screen for dementia. A Mungas-adjusted score of 23 or below indicates cognitive impairment.

Walking Ability: The 10 meter walk test will be used to evaluate walking ability, which has been used as a screening instrument to measure functional mobility and gait speed in physical activity interventions with older adults.

Demographics: The CLaRO Demographics Form will be used to collect demographic information (e.g., gender, education, income, preferred language, country of origin, time in the US, etc.) and will include a list of all diagnosed medical conditions and medications.

Acculturation: The 24-item Bidimensional Acculturation Scale (BAS) will be used to measure acculturation.

Depression Severity: The 20-item Center for Epidemiologic Studies Depression (CES-D) Scale and the 9-item Patient Health Questionnaire (PHQ-9) will be used to measure depression severity.

Anxiety Severity: The 7-item Generalized Anxiety Disorder (GAD-7) scale and the 14-item Perceived Stress Scale will be used to measure anxiety severity.

Social Support: Perceived social support will be measured using the 12-item Multidimensional Scale of Perceived Social Support (MSPSS).

Health Related Quality of Life: The SF-12 will be used to assess for health related quality of life.

Physical Activity: The 16-item Global Physical Activity Questionnaire (GPAQ) will be used to measure physical activity.

Stigma: The HIV Stigma Scale (HSS) is a 40 item measure of stigma and psychosocial aspects of having HIV.

Project Evaluation: we will use a project evaluation questionnaire developed by investigators at the CNSA and used in previous studies. The items are a mix of rating scales, yes/no questions, and open-ended questions that allow participants to give feedback in short answer format with specific interest in understanding the participants' opinions regarding the specific components of the intervention.

After the baseline assessment, participants will be enrolled into the HOLA intervention.

Intervention Description: Content and Structure of HOLA

HOLA is a 16-week multi-component, health promotion intervention for older Latinos with subthreshold depression or anxiety. Aside from the maintenance phase (described below), the length and content of the intervention remain unchanged from the pilot study.

The first component of HOLA consists of two manualized social and physical activation sessions. Prior to beginning the group walk phase, each participant will meet individually with a CHW for the physical and social activation session. This session will last 30 minutes. The purpose of this session is to (a) educate potential participants about the goals of the intervention; (b) to motivate participants to engage in physical activity; (c) to increase participants' social activities (d) identify potential obstacles that may interfere with meeting the demands of the intervention; and (e) to brainstorm ways to overcome these obstacles. Participants will meet individually with the CHW for 30 minutes during week 8 to discuss progress of physical and social activity goals. These meetings will be held in the participants' homes.

The second component is a group walk, led by a CHW for 45 minutes, 3 times a week. The group walk protocol uses the concept of interval training. An interval program requires that the work phase be higher intensity than the active recovery phase. The program starts slowly and gradually increases in workload by manipulating three factors: (a) intensity: governed by speed; (b) volume: duration and/or distance; and (c) work/recovery cycle: how long work phase lasts compared to the recovery phase. The intensity of the workout will be governed by the participants own perceived effort. The subject should learn to "feel" three intensity levels: low, medium and high. Low intensity can be defined as walking at a level that is equivalent to walking through a mall while easily having a conversation with a friend. Moderate intensity is when the subject notices his/her breathing increasing to slight discomfort, and he or she is walking at a good pace. High intensity is walking at a speed where the participant is short of breath and can't maintain the pace. Our decision to use walking as the exercise mode for activation is scientifically sound since no mode or location of aerobic exercise appears to be superior to another. Walks will be conducted with a group of six participants. Each walk will begin with 10 minutes of stretching and warm up. Then, participants will walk for 30 minutes. The walk will conclude with 5 minutes of cool down. The

groups will be mixed gender and will include bilingual and monolingual Spanish speaking participants.

The third component consists of scheduling pleasant events. During the cool down phase of each walking session, the CHW will ask each participant to identify a pleasant event that they intend to do with another person before the next meeting. The CHW will be trained to problem solve (e.g. brainstorming) if a member of the group cannot think of a pleasant event. Subsequent sessions will start with participants reporting on how effectively they implemented their pleasant event plan while the CHW and the group provide positive reinforcement and feedback. This component provides a means to generalize the intervention into the participants' every day lives. Mood ratings will be taken directly before and after each walk so participants can see, in real time, changes in their moods. These motivational tools stem from our qualitative study in which participants reported feeling motivated to engage in health promotion when they received positive reinforcement through clear indicators of progress. Participants will walk at a centrally located public park.

The final component is a maintenance phase consisting of one "booster" walking session twice a month for three months post intervention to reinforce the behavior change and maintain the effects of the intervention. We believe that we are more likely to detect sustained effect if maintenance is provided.

Should unavoidable circumstances arise and in-person meetings are not possible then the CHW will have regularly scheduled phone call with the participants to maintain motivation for increased physical activity and pleasant events.

Management of safety concerns

If a participant meets criteria for major depressive disorder or an anxiety disorder, the following steps will be taken. First, the RA will seek written permission from the participant to contact his/her PCP or a mental health professional. Second, the RA will contact the PI to discuss the situation. Third, the PI will contact the PCP or a mental health professional informing them of their patient's positive screen. Fourth, the PI will coordinate with the PCP or mental health professional and the participant to set up an appointment.

9) Data and Specimen Banking*

Data will be collected using an Apple ipad with pre-programmed questionnaires. Data will be exported to SPSS for analysis. All electronic data will be stripped of identifiers and will be stored in password-protected files. For each data file, a code number will be assigned, and the master list, linking code numbers with names, will be stored separately. The data will be stored on password protected, network computer hard drives at the CNSA, which will only be accessible to the PI.

Blood samples will be stored at the University of Miami Center for AIDS Research Laboratory Sciences Core (D) at -80 ºC until analysis. The labels on the blood

sample tubes will not contain *participant ID numbers*. The blood samples will be stored in locked freezers in locked rooms within access-limited sections of the building.

All the data will be stored and secured using the procedure implemented by the Data Manager of the CNSA. The access to records and participants data will be allowed only to the study personnel.

Study data request goes through a web-based check-in and check-out procedure implemented by the CNSA. The Data Manager of the Center or designee monitors the logs. Upon de granting of the approval, the requester will either get the hard copy of the data or link to access the electronic data. All the data will not contain any identifying information.

Other parties interested in utilizing the samples for research will be required to provide a written protocol to the PI and the gatekeeper(s) for approval. Should samples be shared, no identifying information will be provided. Material Transfer Agreement will be negotiated between UM and the investigators requesting the data.

10) Data Management*

As a pilot study, we will evaluate the feasibility of recruitment, assessment procedures, retention, acceptability, and implementation of HOLA in a sample of midlife and older Latinos living with HIV (**Aim 1**). Consistent with recommendations from biostatistical workgroups funded by NIH, this pilot study is not powered to test a hypothesis. This approach to analysis of feasibility data mirrors the structure of the first HOLA trial and other pilot trials conducted at the CNSA. Successful recruitment will be defined as meeting 100% of targeted sample (N = 18), with 20% or less of eligible subjects refusing to participate. Adequate retention will be defined as 85% or more of randomized subjects completing the post-intervention assessment. Acceptability is defined as 80% or more of sessions attended by subjects. To identify modifications needed in the design of a larger, confirmatory randomized controlled trial (**Aim 2**), we will use a project evaluation questionnaire developed by investigators at the CNSA and used in previous studies. The items are a mix of rating scales, yes/no questions, and open-ended questions that allow participants to give feedback in short answer format with specific interest in understanding the participants' opinions regarding the specific components of the intervention. To explore changes in cardiometabolic risk factors (waist circumference, dyslipidemia, hypertension, and glucose), psychosocial functioning (depression and anxiety severity, social support), and health-related quality of life (**Aim 3**), a one-way ANOVA will be used to illustrate the change in scores from baseline to post-intervention in all the outcome measures used.

A repeated measures ANOVA, as we have proposed, is appropriate to explore the intervention effects on cardiometabolic risk factors,

psychosocial functioning, and health-related quality of life given that this type of analysis is often used in studies that investigate either changes in mean scores over three or more time points. In the exploratory analyses, we will use age, SES, and years of education as covariates. In addition, a list of current medications will also be collected at baseline. Should the participants' medications be dose-adjusted, changed altogether, or if they are started on new medications such as statins, then we will adjust for them in them in the exploratory analysis as well. Covariates will be tested as moderators of treatment response.

Maintenance of Confidentiality:

Our staff is CITI certified and trained with maintenance of confidentiality. The information provided by study participants will be held as personal and confidential to the extent permitted by law. In addition to the safeguards included as part of the recruitment and screening process by assigning a patient a study ID to de-identify participants, all study participants will be given the contact information for the Principal Investigators to answer any questions that may arise. Participants will be informed that they may end their participation at any time without affecting access to any other services they may receive from the UM/JMMC Adult HIV Outpatient Clinic. All study procedures will be conducted according to good clinical practice and all other relevant regulatory guidelines.

All electronic data will be stripped of identifiers and stored in password-protected files on servers at the University of Miami Center on Aging. These data are password secured for minimal access to authorized personnel associated with the study. For each data file, a code number will be assigned, and the master list, linking code numbers with names, will be stored separately. At the conclusion of the project, the record linking the assigned research number and participant identity will be destroyed. Data will be entered into password secured databases by staff authorized by the principal investigator to do this, and they will abide by confidentiality regulations of the HSRO. No subject will be identified by any published report.

11) Provisions to Monitor the Data to Ensure the Safety of Subjects*

The Principal Investigator, Dr. Daniel E. Jimenez, assumes responsibility for developing and implementing a data and safety monitoring plan to assure minimal risk and data integrity in this study. The plan assures that all data collected concur with all local, state and federal guidelines. The PI will work closely with his collaborators and will follow any data monitoring and safety requirements set forth by NIH.

The PI will examine accumulating data to assure protection of participants' safety while the study's scientific goals are being met and

will conduct periodic reviews of accumulating safety and efficacy data. Along with his collaborators at the University of Miami Miller School of Medicine, he will determine whether there is support for continuation of the study, or evidence that study procedures should be changed, or if the study should be halted, for reasons relating to the safety of the study participants, the feasibility of the intervention under study, or inadequate study procedures (e.g., poor recruitment).

Procedures for the study will follow quality assurance (QA) procedures established by CLaRO for data management and safety, to ensure quality and consistency in the implementation of the protocol and data quality, to adhere to regulatory requirements and, most importantly, to protect the safety of study participants. The study will be monitored by the CLaRO Study Monitoring Unit, which is based at the School of Nursing and Health Studies. The Study Monitoring Unit will (1) verify compliance with regulatory requirements, (2) ensure that the PI and engaged study team members are fully informed of regulatory requirements and properly trained to perform the duties assigned, and (3) monitor procedures to prevent errors and minimize protocol deviations that can negatively affect quality of the data collected and compromise human subjects' protection. The project will have a quality assurance (QA) review: prior to initiation, upon conducting baseline procedures with the first wave of study participants; and bi-annually for interim reviews. For the initiation review the Study Monitoring team reviews protocol procedures and their manualization, documentation of staff training, evaluates that the study site is prepared to conduct the study, and ensures that the Regulatory Binder is complete. Interim monitoring visits will verify that study screening, consent, and data storage procedures are being conducted as stated in protocol. After each QA visit the Study Monitoring team prepares a written report that is sent to the study PI and to the CLaRO Executive Committee. These reports include deficiencies noted and plans for corrective action. The Study Monitoring team follows up with the study team to ensure that the corrective plan and any required reports to the IRB are filed in a timely manner. Protocol violations that are recurrent or serious will be brought to the attention of the CLaRO Executive Committee for determinations regarding corrective action.

Adverse Event Reporting

In the event that an adverse event or otherwise untoward incident occurs as a direct result or in the context of the project, we will closely follow IRB directives and reporting policies. Specifically, we will report to the University of Miami IRB within 10 working days, in writing, all serious adverse or otherwise untoward events associated with procedures. To ensure monitoring of other study-related participant safety events or incidents, procedures regarding confidentiality and data integrity will be continually monitored and regularly audited.

In our experience, serious, unexpected adverse events related to study participation are rare. In addition, screening for adverse events potentially related

to the study intervention will occur during the routine administration of study assessment measures. These interview-based indicators will augment required Serious Adverse Event (SAE) reports by the CHWs and study personnel, including specific items in the assessment interviews evaluating episodes of muscle or fall-related injuries, unexpected medical events, medical emergency room admissions, medical hospitalizations, or unplanned medical clinic visits. Should an adverse event occur, Dr. Jimenez (PI) will report it to the University of Miami Institutional Review Board (IRB) using the IRB SAE form. Dr. Jimenez, in collaboration with co-investigators, will review the adverse event report and gather other information as needed to investigate it and determine the need for subsequent action. Dr. Jimenez will ensure that all adverse events are reported to the IRB in accordance with the University of Miami policies and in a timely manner. Any subsequent action will be documented and reported to the IRB.

Identifying Events: As noted, we will operationalize adverse/safety events for the study and protocols for their resolution. All interventionists and assessors will be trained on these protocols. Initially we will base these protocols on those developed for the HOLA pilot trial. For that trial, there were two categories of events: adverse events and safety alerts. These events may be identified during the baseline interview or the intervention period. Baseline adverse events are items that are identified and recorded by the interviewer during the baseline interview and are unrelated to the study or intervention. Adverse events are situations that occurred during the intervention period and are identified by the interventionist or by the interviewer during the 3 month assessments or any off-protocol interaction with a participant. All off-protocol contacts will be recorded. Adverse events occur anytime following randomization until study completion. Safety alerts are identified by the interviewer during the baseline interview or occur anytime following randomization until study completion. Below are the specific events that trigger a formal response:

Acute Baseline Alerts/Adverse Events

- Hospitalization of Participant
- Institutionalization of Participant
- Emergency Room Visit of Participant
- Death of Participant

Safety Alerts/Adverse Events

- Severe Medical Problem of Participant
- Participant has CES-D score greater than or equal to 20
- Participant Abuse
- Participant threatens to harm him or herself or others

The baseline adverse events and adverse events that occur during the study period are events that fall within the standard definition of adverse events within a clinical intervention study. Safety alerts are those events that do not fall within the standard definition of adverse events but are specific to the participant population.

Reviewing and Reporting Adverse Events: When an alert or adverse event is

identified by a member of the research team the event must be reported to the PIs or designee within 24 hours and recorded on the Alert/Adverse Event Form. The event must be resolved using the approved protocol within 3 days of learning of the event. For example, any uncovering of incidental findings by the research staff will immediately be reported to Dr. Jimenez who will a) review the information; b) meet with participants to make appropriate referrals and to c) take any actions that are required by state law to insure the safety of participants. As noted, the informed consent will make clear to participants that any incidental findings that suggest that there is imminent danger may engender certain reporting requirements by state and federal law. For example, if participant abuse is suspected during a participant contact, the assessor/interventionist will report the event to the PIs or designee (e.g., clinical supervisor, project manager) will contact the participant to determine the nature of the situation and to devise a plan of action. The participant will be advised to contact their primary care physician. If the participant refuses or is not able to able to control the situation Adult Protective Services may be contacted. In the event that an unclassified or emergency situation does arise, personnel are advised to consult with the PI,or if circumstances do not allow for such consultation to use their best judgment (e.g., call 911 if necessary). Documentation of all adverse/safety events will be maintained in locked files in the Center for Cognitive Neuroscience and Aging.

Dr. Jimenez will promptly inform other collaborators of any proposed changes in recruitment or in the protocol that are relevant to safety, as well as any actions taken by the IRB as a result of their continuing review of the project. In the event of any major changes in the status of an ongoing protocol, which will occur only with IRB approval, the PI will inform CLaRO staff immediately. Such changes would include, but are not limited to:

- Amendments to the protocol
- Temporary suspension of participant accrual, or of the protocol
- Any change in informed consent or IRB approval status
- Termination of participant accrual, or of the protocol
- Other problems or issues that could affect the human subjects in the study

12) **Withdrawal of Subjects***

If a subject finds the research procedures to be upsetting or aversive, they will have the option to withdraw from the study. Participation will be completely voluntary, and will not affect the treatment they are receiving. Participants will be told that they may choose not to answer any questions and may decide to terminate the interview at any time. Research staff will be instructed to terminate interview sessions if participants appear to be stressed by the process. Additionally, the research staff will know how to link participants immediately with treatment personnel including case managers or therapists if participants appear to be stressed.

13) **Risks to Subjects***

The risks associated with participation in the study are deemed to be low and are outweighed by the potential benefits. Nevertheless, this study involves the administration of assessment instruments that may cause minor discomfort, and the risk of loss of confidentiality. All participants will be informed that information obtained in these interviews is confidential and that they can choose not to answer any questions. If participants feel uncomfortable during the research interview, they will be encouraged to take a break and to continue again later or will be asked if they want to stop the interview. The research assistant (RA) may also offer to call a case manager, another staff member, or concerned others (such as a close friend) to make sure the participant has someone to talk with about the interview. Some questions or tasks may cause some individuals to become uncomfortable. This has happened rarely with similar interview sessions. In fact, most participants experience the interview process in a positive way and enjoy the opportunity to be heard by an interested listener. Individuals with depression and anxiety typically feel enhanced rather than diminished by these interviews. Nevertheless, several precautions will be taken to prevent stress from developing during the interview.

Overall, study personnel and collecting outcomes data are all experienced in conducting clinical research and are able to engage subjects without causing them distress. If a subject finds the research procedures to be upsetting or aversive, they will have the option to withdraw from the study. Participation will be completely voluntary, and will not affect the treatment they are receiving at the UM/JMMC Adult HIV Outpatient Clinic. Participants will be told that they may choose not to answer any questions and may decide to terminate the interview at any time. Research staff will be instructed to terminate interview sessions if participants appear to be stressed by the process. Additionally, the research staff will know how to link participants immediately with treatment personnel including case managers or therapists if participants appear to be stressed.

Protection for Suicide and Depression Risk: Subjects who become suicidal or psychotic will be withdrawn from the study and offered (or when necessary, involuntarily given) appropriate treatment. Our screening process will include an assessment to identify participants at risk of suicide. Potential participants will be told before screening that a positive screen will lead to disclosure of this information to their primary care provider (PCP) or to a mental health professional to maintain safety. The Paykel Suicide Items152 will be administered by a trained RA at every baseline and follow up assessment. In the unlikely event that suicidal ideation is detected the following steps will be taken. First, the RA will inform the participant that this information is very important and needs to be shared with his/her PCP or with a mental health professional immediately (as discussed prior to the screener). Second, the RA will then

contact the principal investigator (PI) to discuss the situation. Third, the PI will contact the participant's PCP to ensure the participant is evaluated promptly for safety. Fourth, if the PCP is not available, the PI will arrange for transportation to the nearest emergency room. The RA will remain with the participant until the individual is assessed by a mental health professional or ER physician.

If a participant meets criteria for major depressive disorder or an anxiety disorder, the following steps will be taken. First, the RA will seek written permission from the participant to contact his/her PCP or a mental health professional. Second, the RA will contact the PI to discuss the situation. Third, the PI will contact the PCP or a mental health professional informing them of their patient's positive screen. Fourth, the PI will coordinate with the PCP or mental health professional and the participant to set up an appointment.

Protection of Risk of Physical Discomfort: Because the HOLA intervention involves physical exercise, to which some participants may be unaccustomed, we will put several safeguards in place to avoid injury or harm. These safeguards have been used successfully in other studies involving exercise done by Dr. Signorile (co-investigator). First, the 10 meter walk test will be used to evaluate walking ability. The use of this test is recommended in order to obtain the most valid clinical assessment of walking speed when using it as a 1-time indicator of health status. Second, all participants will be required to have a written medical clearance for participation in the study. In addition, all participants will be evaluated with a set of screening questions to identify individuals who may be at risk of harm from engaging in exercise. We will require these individuals to additionally obtain written recommendations for physical exertion from their physicians specifically responding to the identified health concern before engaging in HOLA. Third, CHWs will work with participants to set exercise goals that are safe and reasonable in relation to their exercise capacity. Furthermore, exercise plans and instructions to participants will be within the accepted range recommended by the American College of Sports Medicine guidelines. Fourth, CHWs will supervise all walks to observe participants' ability to tolerate exercise. CHWs will maintain a list of the phone numbers of the participants' physicians to contact with health concerns about participants. CHWs will be certified in CPR and will have cell phone capacity in the unusual event of a medical emergency. In the case of minor effects of exercise such as muscle soreness, CHWs will be trained to provide advice regarding stretching or other remedies to ameliorate symptoms. If symptoms worsen, the exercise protocol will be modified after discussion with Dr. Signorile.

Protection of Risks During Venipuncture: Blood draws will be performed by certified phlebotomists who routinely perform venipuncture; steps will be taken to diminish the risk of minimal discomfort, bruising, excessive bleeding, clotting, and/or fainting. If subjects have unusual symptoms,

pain, or any other problems arising due to venipuncture, they can also contact the CHW or PI directly.

14) Potential Benefits to Subjects*

The potential benefits of the project to the participant is that the participant may acquire and practice health behaviors that lead to a decreased risk of developing cardiometabolic disease. The benefit to society is that the project may help demonstrate the effectiveness of the HOLA health promotion intervention in preventing cardiometabolic disease in HIV-infected patients.

In relation to the anticipated benefits, the risks to the subjects are reasonable in relation to the benefit of not developing a life-threatening cardiometabolic disease. Participants are de-identified to minimize loss of confidentiality; suicidality or severe depressed can be addressed by trained mental health professionals; discomfort during venipuncture is mitigated by trained phlebotomists.

15) Vulnerable Populations*

N/A

16) Multi-Site Research*

This is not a multi-site study.

17) Community-Based Participatory Research*

N/A

18) Sharing of Results with Subjects*

Study results will be published in scientific journals. Individual subject results will not be shared unless the safety of the participant is at risk.

19) Setting

Group walks will be conducted at a public park that is centrally located to the participants. All assessments and blood draws will be conducted in private rooms at the at the UM/JMMC Adult HIV Outpatient Clinic.

20) Resources Available

Department of Psychiatry and Behavioral Sciences
The Department of Psychiatry and Behavioral Sciences offers clinical evaluation and treatment services for a broad range of emotional, cognitive, and behavioral disorders in patients of all ages, socioeconomic levels, and cultural backgrounds. Services are available on an outpatient, inpatient, or partial hospitalization basis and include individual, family, and group approaches. Specialty areas include geriatric psychiatry, anxiety and mood disorders, stress and psychobiologic dysfunction; biofeedback; behavioral medicine; memory disorders; psychopharmacology; alcohol and substance abuse; and women's mental health, among others. The

Center on Aging, among others, link other organizations in research, education, and treatment for special populations at risk. The Department's outpatient programs are located in the Jackson Mental Health Hospital Center. Inpatient facilities for children, adolescents, and adults are located at the Jackson Mental Health Hospital Center and the Highland Park Pavilion, as well as the University of Miami Hospital and Miami VA Medical Center. Through its Division of Consultation Psychiatry and Psychosomatic Medicine, the Department provides consultation to all clinical departments as well as programs of illness prevention and long term care management. The Department provides educational and consultative services to the Dade County Jail, the South Florida Evaluation and Treatment Center, and various courts and governmental agencies through its Forensic Psychiatry Program.

Center for Latino Health Research Opportunities (CLaRO)

The NIMHD has renewed support of health disparities research at the SONHS through the Center for Latino Health Research Opportunities (CLaRO; U54MD002266-11). CLaRO, an interdisciplinary center led in collaboration with Florida International University, is funded from 2017-2022. CLaRO's unifying theme is conducting and promoting multi-level community-based participatory research to prevent substance use, violence/trauma and HIV/AIDS syndemic conditions and reduce their adverse health and mental health outcomes. CLaRO's focus is on tailored interventions for Latino subgroups who represent pockets of vulnerability and require precise and specialized interventions that optimize access to and impact of interventions. CLaRO contains two community-based randomized trials of culturally-tailored behavioral interventions: (1) HoMBRES de Familia, which is testing an intervention to prevent HIV, substance abuse and violence among Latino seasonal farmworker fathers and their sons; and (2) Computer Assisted Family Intervention to Treat Self-Harm Disparities in Latinas and Sexual/Gender Minority Youth (CA CIFFTA), which tests a family intervention for Latinas and sexual/gender minority youth. CLARO also sponsors a Pilot Projects Program, scientific resources, training and mentorship to serve as an engine for the advancement of early-stage investigators and for diversifying the workforce of successful health disparities investigators. The CLaRO theme, agenda and priorities were developed in collaboration with a network of community partners who will play an ongoing role as a Community Advisory Board, in guiding and disseminating CLaRO science and advancing neighborhood capacity building and multilevel interventions to promote health in Latino communities.

As a CLaRO pilot awardee, I will have access to training and mentoring activities throughout the pilot award, which will enhance the success of this proposal. CLaRO keeps a database of common measures for constructs relevant to their studies, which I will utilized for my proposal

and will continue to use. I will also benefit from oversight from CLaRO's Investigator Development Core and Executive Committee. As stated in my training plan, I will continue participating in CLaRO's training activities, such as the recent summer training program focused on Latino health disparities research. Finally, I will be part of a cohort of pilot awardees who are also conducting research related to Latino health disparities and we will meet monthly for ongoing support and potential collaboration.

21) Prior Approvals

N/A

22) Confidentiality

This is not a multicenter study. Please see above for information how we will maintain confidentiality.

23) Provisions to Protect the Privacy Interests of Subjects

Participants will sign a statement attesting to their understanding that their information will be kept private and confidential to the extent permitted by law. Participants know that they will be assigned unique case numbers (and their names will not be used) to protect their identity. Participants will be encouraged to ask questions throughout the consent process and will be provided contact information for Dr. Jimenez (PI) and the University of Miami's Human Subjects Research Office. Data will only be available to researchers approved by the IRB and to the study monitoring unit. Participants will be reminded of their ability to stop the interview or refuse to answer questions that make them uncomfortable. During all study procedures (e.g., recruitment, consent process), participants will be assured that their information is confidential and will sign a statement attesting to their understanding that their information will be kept private and confidential to the extent permitted by law.

Participants know that they will be assigned unique case numbers (and that their names will not be used) to protect their identity

24) Compensation for Research-Related Injury

Although risks are unlikely, an injury may occur. If an injury should occur, treatment will in most cases be available. If participants have insurance, their insurance company may or may not pay for these costs. If they do not have insurance, or if their insurance company refuses to pay, they will be expected to pay. Funds to compensate for pain, expenses, lost wages and other damages caused by injury are not routinely available.

25) Economic Burden to Subjects

There are no costs associated with your participation in this study.

26) Consent Process

For individuals that are interested in the participating in the research study, the study will obtain an informed consent form from the participant. The study will provide the participant a copy of the consent form, and, because the participant may have a low level of literacy, will then read the consent form out loud.

Once the entire consent form has been read and explained, the assessor will give the participant a chance to ask any additional questions. If the participant agrees to participate, they will be asked to sign the informed consent form and will be given a copy of the signed form.

The consent form for participation in the study are submitted within this protocol for approval to the University of Miami Institutional Review Board (IRB) Behavioral Subcommittee for the Protection of Human Subjects.

Non-English Speaking Subjects

Should the need arise, we will translate and back-translate the informed consent forms and submit them to the IRB for approval.

Waiver or Alteration of Consent Process (consent will not be obtained, required information will not be disclosed, or the research involves deception)

N/A

Subjects who are not yet adults (infants, children, teenagers)

N/A

Cognitively Impaired Adults

Cognitively impaired adults will be excluded from this study.

Adults Unable to Consent

Adults who are unable to consent will be excluded from this study.

27) Process to Document Consent in Writing

Signed consent will be collected. After the study is explained and the study participant verbally indicates that he or she understands study procedures, the participant will sign and date the consent form. The participant will be given a copy of the signed consent form for his/her records, and the second copy will be stored in a locked office.

28) Drugs or Devices

N/A