Protocol Title: Addressing Cervical Cancer Disparity in South Florida: CBPR in Action
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1) **Protocol Title**
Addressing Cervical Cancer Disparity in South Florida: CBPR in Action

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(Listed on IRB7)

6) **IRB Review History**

N/A

7) **Objectives**

The study entitled "Health in Your Hands" will test the significance of community health worker participation by comparing Human Papilloma Virus (HPV) self-sampling provided by a community health worker and HPV self-sampling provided by mail. The study will enroll 700 participants in communities characterized by health disparities and lack of access to the formal healthcare system, such as Little Haiti, Hialeah, and South Dade.

8) **Background***

In Miami, Florida, cervical cancer is a particular problem for Haitian and Caribbean Hispanic women. When compared to other racial/ethnic minority and immigrant groups in the Miami metropolitan area, Haitian and Hispanic women contribute disproportionately to cervical cancer incidence, morbidity and mortality, largely as a function of their underutilization of Pap smear screening. They do not undergo Pap smear screening for a myriad of reasons, including, but not limited to: poverty; language difficulties; limited access to health care; lack of knowledge about cancer and the importance of early detection; cancer fatalism or the belief that cancer implies death; and, cultural norms about health and disease prevention. The proposed project aims to overcome such barriers.

With funding from the National Cancer Institute, we have documented the prevalence of lifetime and routine Pap smear among women living in our communities of interest. Between March and May 2011, the community health workers approached approximately 200 women from various community venues across Little Haiti, Hialeah and West Perrine including Laundromats, health clinics, and churches. Of the participants, 71% reported having at least one Pap smear in their life. Of those with a history of screening (n=143), only 80% reported having a least one Pap smear in the past three years as recommended by national guidelines. There is not a direct comparison for our data, though in relation to national averages and data, the women in our sample appear to be under-screened.

Following this data, a pilot study was conducted (funded by UM Sylvester and the University of Miami Institute for Women's Health) to examine whether Haitian women consider self-sampling a culturally-acceptable alternative to the Pap smear. A total of 250 women agreed to participate in

the study, which involved cervical self-sampling with the POI/NIH device (essentially a long q-tip with a protective sheath), as well as, completing a detailed survey. Findings indicate that acceptability of the device is high, that the majority of women prefer the self-sampler to the traditional, physician speculum exam and find it easy and comfortable to use. In addition to such positive results, this pilot study helped to establish the infrastructure necessary for successfully carrying out the proposed study.

9) Inclusion and Exclusion Criteria

Rational for inclusion/exclusion criteria: our target population is ethnic minority females aged 30-65 living in one of the three target communities who have not been screened for cervical cancer in the past three years (as per recent guidelines).

To be eligible women must be:

- Haitian, Hispanic, or African American
- ages 30-65 years
- report not having had a pap smear in the last three years
- live in the cities of Miami/Little Haiti, Hialeah or unincorporated Southern Miami-Dade

EXCLUSION CRITERIA:

Women will not be included in the study if they:

- report having had a hysterectomy
- have a history of cervical cancer
- plan to move outside of Miami-Dade county during the next six months
- are enrolled in any other cancer prevention/outreach related study

The study will exclude:

- Adults unable to consent
- Individuals who are not yet adults (infants, children, teenagers)
- Pregnant women
- Prisoners

10) Number of Subjects

700

11) Study-Wide Recruitment Methods

Participants will be recruited to participate in the study primarily through the efforts of Community Health Workers (CHWs), who are indigenous to the area, employed by our community partners and certified to conduct research by the University of Miami (UM) Institutional Review Board (IRB). The CHWs are not UM employees but are CITI-certified and are from either the Health

Choice Network, which includes the Citrus Health Network and Community Health of South Florida, Inc. (CHI), and the Center for Haitian Studies (CHS).

The CHWs will be trained by the Principal Investigator and community partners about how to approach potentially eligible individuals and encourage their participation in the study. They will recruit participants from various community settings in Little Haiti, Hialeah, and South Dade, such as laundromats, flea markets, health clinics, local botanicas, and church gatherings, that have been identified through ethnographic community mapping as regularly frequented by the target population. The CHWs will also rely heavily on their own social networks and those of the community leaders, to identify potentially eligible participants.

Although we recognize the inherent limitations in such non-probability approaches to sampling, our preliminary research in Little Haiti and Hialeah indicates that more random recruitment strategies engender suspicion and compromise overall participation. As a result, we must employ a non-probability, purposive quota-based sampling strategy to recruit participants. However, we will attempt to introduce randomness into this sample by using recruitment protocols that direct the CHWs to approach every Nth woman in socially salient community settings. We will compare study samples with data abstracted from the US census to better understand whether our sample is, in fact, representative of our target communities.

Community Advisory Group members will also promote our research agenda through culturally-appropriate communication channels, such as radio and print media. Radio is the primary news source for a majority of residents in our target communities, and can help generate community interest in, and support for the proposed research.

12) **Study Timelines**

An individual will participate in the study for six months (baseline interview at intake and a six-month follow-up interview). We estimate the time necessary to enroll all study subjects will be 27 months. The estimated date for completion of the study is May 1, 2017.

13) **Study Endpoints***

Our primary endpoint is a returned HPV self-sampler kit. We have several planned subgroup analysis to help us understand if our intervention was more effective among certain population sub-groups. We therefore propose to examine whether the intervention was more efficacious among women with lower levels of educational attainment and those who are uninsured/underinsured. We consider all these analysis to be hypothesis generating, rather than hypothesis testing, given limited power. We also plan to examine several secondary endpoints, including: a) Access to care (health insurance, having a usual source of care, and visit to provider in six months). These would be analyzed as binary variables and would help explore if HPV self-sampling led to a decrease in access. b) Cervical cancer knowledge to help determine study fidelity. This is a continuous variable based on summed number of correct answers. c) Knowledge of test results and, for those with an abnormal screen, the proportion of women in each group who received appropriate initial follow-up within 30 days of the abnormal screen d) Acceptability of screening delivery.

14) **Procedures Involved***

Determination of eligibility The CHWs will screen potential participants for eligibility by asking whether they are 1) Haitian, Hispanic or African American, 2) 30-65 years of age or older, 3) have not had a Pap smear in the past three years, 4) has not had a hysterectomy, 5) has not been enrolled in a similar study (e.g. SUCCESS), 6) is not pregnant, 7) will not move in the next 6 months. For those women who screen potentially eligible, the CHW will further describe the study. Potential participants will be told that we are conducting a research study to determine the best method to increase rates of cervical cancer screening among women in their community. They will be told that the study will involve a brief education session about cervical cancer prevention and treatment, as well as instructions on how to use the HPV self-sampler we will be providing them with.

- **Women who decline participation**: For women who are potentially eligible but were not interested in participating, the brief demographic information collected during the eligibility screen (age, ethnicity) will be kept without any identifiable information. This data will be used to compare responders versus non-responders.
- **Women who agree to participate**: The CHW will obtain signed informed consent from the women who are interested in participating.

Informed Consent and Intake Survey: After obtaining consent, the CHW will proceed with the intake interview. The intake interview will be conducted by our research assistants/community health educators (CHEs) to avoid introducing bias into our study design. Prior to beginning the intake survey, the CHE will first conduct another inclusion screen to verify that the potential participant still meets study inclusion criteria. The CHE will then re-explain the study to the potential participant and answer any questions she may have. If she is still agreeable to participating, the CHE will obtain signed informed consent. After obtaining consent, the CHE will proceed with the intake interview. The CHW will explain to participant that she will participate in two interviews 6 months apart, where each interview will take approximately 30 minutes to complete. This home interview will be conducted using laptop computers with wireless cards allowing access to the Research Electronic Data Capture (REDCap) web-based platform (see below). Backup paper copies will be available in case the CHE experiences difficulty accessing the web.
After completion of the intake survey, the participant will receive a $25 gift card for their time and participation.

Randomization: Once participants complete the screening intake, they will be randomized into one of two possible interventions. Participants will be provided randomization information via phone by the CHW. Randomization will be done by REDCap, a secure web-based and HIPPA compliant system that allows to manage online surveys, database and reporting.

A custom allocation list has been created, which serves as a lookup table for deciding how to randomize subjects. Randomization of subjects will occur on the data collection form where your randomization field. After a subject has been randomized, it will become permanently locked and unmodifiable. The randomization field will always be locked and unmodifiable both before and after randomization has occurred for a subject. When the user randomizes the subject, REDCap will check the allocation table and assign that subject's randomization field value, which will be derived from the next match in the table based upon the criteria. In this case, it will simply provide the subject with the very next value in the allocation table.
Study personnel involved in accessing randomization data will include the Principal Investigator, Study Manager, REDCap Administrator, Research Associate/Data Manager and Statisticians. A specific REDCap form will be used for randomization results. Randomization will occur on a weekly basis for all subjects whose data were uploaded that week. The CHEs will be blinded to

participants' randomization assignment groups. The randomization group assignments will be accessed by the Study Manager, who will communicate the randomization results to the CHWs.

In our research, we plan to use a self-sampling device developed by Preventive Oncology International (POI) and the National Institutes of Health (NIH). The POI/NIH self-sampler is considered a non-significant risk device and has been approved for research conducted by NIH faculty throughout the United States and in various international settings. This device is manufactured by Puritan Medical Products, and is thought to reflect an improvement over other self-samplers, given a larger Collection Swab tip, which enables a woman to collect cells from more of the cervix's total surface area with less effort. The POI/NIH self-sampler is a 20 cm in diameter, which is similar to a regular-sized tampon. This sampler is easy to use. A woman inserts the device into her vagina until she feels slight resistance. The participant then holds the paddle end of the Collection Swab and rotates it five times. She then withdraws the Collection Swab. Once the Collection Swab is fully removed from the vagina, the participant places the Collection Swab into liquid cell preservative and rotates it five times. The participant can then dispose of the swab in a household trashcan and secure the vial lid. The vial can be placed back into the pre-addressed, stamped envelope and mailed to the SCCC for testing. The specimen can be stored at room temperature, and HPV testing can be effectively performed on this single specimen.

The HPV self-sampler kit will include: 1) the HPV self-sampler (collection swab and the vial for collecting and storing the specimen; 2) a pre-addressed, stamped envelope for returning the vial to the SCCC laboratory for testing; 3) a postcard which includes a picture and information of the CHW that serves to re-orient the participant to the focus of the study; 4) an instructional sheet that visually depicts the steps for self-sampling; 5) information provided by our community partner in each site about their organization, the medical services provided, and how to schedule a Pap smear. We believe it is necessary for women to be exposed to information about Pap smears, given that they remain the standard for disease prevention throughout the life course. At the six-month follow-up interview, participants in this arm will be asked for detailed feedback about the kit and any recommendations for how to improve it.

The CHW will call participants within a week, using the randomization phone script, to inform them of 1) randomization group allocation, 2) conduct brief health education over the phone, and 3) schedule a home visit (Group 1) or inform participant that kit will be mailed within one week (Group 2).

Within one week after completing the intake interview, women randomized to the intervention arm will receive a HPV self-sampling kit via mail (intervention arm- Group 2) or will be given a self-sampling kit by the CHW (control arm- Group 1).

Group 1: Control Group (CHW) - Participants receive HPV self-sampler at **home visit:** . During the home visit, the CHW will provide the participant with brief health education and offer the HPV self-sampler accompanied by an instruction sheet on how to use the self-sampler. The education will include: 1) health education on the importance of cervical cancer screening using a short intervention/educational script and 2) motivation to encourage women to have screening using the HPV self-sampler. Women will also be informed of the following: 1) HPV infection usually is not detectable or harmful; 2) nearly everyone who has had sexual intercourse has been exposed to HPV and infection is very common; 3) a positive HPV test result does not indicate the presence of cancer and that not all women who test positive for an HPV infection will not develop advanced

cancer. It will also be stressed to women that if they have not seen a doctor recently they will still need to see a provider to address other health issues, which may include a gynecologic exam. They will also be advised that if HPV obtained through self-sampling is positive, they will need follow-up medical care at our clinical sites. The participant will have the option of self-sampling at home or mailing the kit back.

Group 2: Intervention Group (Mail Self-Sampler Kit): Participants receive the kit via mail. The Study Manager mails the self-sampler kit to the participant. The CHW will also provide the participant with brief education via phone utilizing a short intervention/educational script. The participant will follow instructions on instruction sheet provided in the kit, and once self-sampling is completed, participant will mail the kit to UM/SCCC.

Report of HPV Lab Results

The Study Manager will receive test results from lab and provide information to CHWs. CHWs will call participants within 4-6 weeks to notify them of their test results when they are received. Participants who test negative will be encouraged to follow-up with their doctor and rescreen in 36 months, based on the US Preventive Services Task Force (USPSTF) guidelines. Participants whose test results indicate insufficient sample (insufficient cellular quantity for analysis) would be asked if they had a hysterectomy. If no, the participant will provide a second sample, and an appointment will be scheduled by CHW. If answered yes, the HPV lab result will be reported to the Study Manager. Participants who test positive for HPV will be navigated to appropriate follow-up care with our community partners and/or Jackson Memorial Hospital (JMH) within 30 days of receiving the result. JMH is the safety net hospital for Miami-Dade County and provides free and low cost care to indigent and medically underserved individuals in the Miami metropolitan area. The CHWs will work with JMH staff to ensure that women with abnormal findings receive timely follow up. The CHWs will follow up with participants who do not return the kit within 30 days.

At 4 months, the CHW calls participants in both arms to verify contact information only.

Exit Survey at 6 months: The CHE will conduct an exit interview/ survey at 6 months with all who participated in the baseline procedures (Arms 1 and 2). The survey will take approximately 30 minutes. At exit, both arms will be offered the option of self-sampling at home or mailing the kit back. The participant on Arm 2 is offered the HPV self-sampler again to be done at home or the participant has the option of mailing it back, in case she did not have the opportunity to complete self-sampling. After completion of the intake survey, the participant will receive a $25 gift card for their time and participation.

15) Data and Specimen Banking

. The Study Manager will take the specimens to the Oncogenomic Core Facility at UM Sylvester Comprehensive Cancer Center (SCCC) for high-risk HPV detection and HPV viral genotyping on a weekly basis. Specimens will be labeled with a number that matches the number assigned to the participant during the study intake. The specimens will *be processed and* Results will be reported back to Study Manager within 2 weeks, who will obtain signature from Dr. Carrasquillo. He will sign and date lab result sheet. Copies of results will be filed and kept in locked cabinet and uploaded to REDCap. The leftover samples will be banked in a secure freezer at the Sylvester

Comprehensive Cancer Center at the University of Miami, Miller School of Medicine for future analysis.

16) **Data Management**

All of the data collected via iPad or paper forms and supporting documentation will be uploaded and stored on REDCap, a web-based management application that is designed specifically for investigators and their research teams. It supports processes for participant recruitment, data collection, database management, reporting and study execution. A major strength for our proposal is that REDCap allows all study related information to be centralized yet be accessed through the internet from anywhere through encrypted and password protected access granted only to authorized UM personnel as designated by the study PIs. It is easy to use, reliable, fully HIPPA complaint and secure. A major advantage of using this system is that UM provides this important resource to UM and associates (such as non UM community research partners) at no cost. This includes technical support and effort of REDCap team staff who provide technical assistance to investigators.

17) **Risks to Subjects**

Participants in the study will be asked a series of questions on health literacy, which involves an understanding of medical terms, access to health care, and cervical cancer knowledge, attitudes and beliefs. There is no risk of physical injury from answering these questions. However, participants may feel uncomfortable by answering some questions about their personal feelings and beliefs. The educational portion with the CHWs may introduce a participant to health concepts that are discordant with their current beliefs. This may cause the participant confusion or frustration, as well as concern for herself, family members, and friends. The participant may also find herself opening up about health issues and concerns that she has previously kept private. This process may cause emotional discomfort.

Regarding the cervical self-sampling device, the two most common problems of self-sampling were: 1) placing the sampler in an incorrect opening (e.g., the anus); and 2) Injury to the vagina or cervix due to aggressive sampling. Also, you may experience cervical bleeding and inflammation from excessive pressure applied during the rotation of the device. If you experience continuous and heavy bleeding, stop using the device and contact the study team immediately. However, both of these hazards are unlikely to occur with the current device. In trials with more than 20,000 women when either problem has occurred, they did not cause serious injury. Rather, they resulted in minimal patient discomfort. Thus, it is considered a non-significant risk device. If you decide that you do not wish to participate in the study after it has started, please tell the research assistant. There is no penalty imposed if you decide to end your participation early and/or refuse to answer any question.

There are psychological risks associated with receiving an abnormal test result from self-sampling. Participants may interpret an abnormal result as a diagnosis of cancer rather than an infection with HPV. The participant may feel hopeless in response to an abnormal result, believing that there is nothing that can help. As a member of an underserved, immigrant, minority group she may feel that adequate health services are not available or accessible to her. She may also feel guilty that she has done something wrong or someone has wished ill health upon her. She

may feel embarrassed to tell her friends, family, and other ones, fearful of how they may judge her and reflect upon her diagnosis.

Adverse Experience Reporting: If any participant who chose to use the HPV self-sampler indicates to CHW that a discomfort is persistent or something else has occurred, CHW should contact directly the Principal Investigators of the study.

18) **Potential Benefits to Subjects**

A potential benefit for all participants is increased knowledge and awareness of one's gynecological and sexual health, specifically information on cervical cancer and the opportunity to be screened. The information learned from this study will increase our understanding of effective ways to do cervical cancer outreach and screening to women who have not been screened. Sharing one's understandings with other members of the community will also increase awareness on a larger scale.

This study may help improve the relationship between the Little Haiti, Hialeah, and South Dade communities and health services. Participants may feel supported and cared for by our community partners.

Women with normal test results will have peace of mind. Women with abnormal test results will hopefully be caught early enough where interventions that will help prevent more severe health issues, such as cervical cancer, are available. Those with abnormal test results whose follow up reveals cervical dysplasia and malignancy will be assisted in navigating the complex healthcare system for follow up care.

19) **Vulnerable Populations**

N/A

20) **Multi-Site Research**

N/A

21) **Community-Based Participatory Research**

Grant funding from the NIH enabled the creation of a University institute to address cancer health disparities. The institute, Jay Weiss Institute for Health Equity, previously known as **S**o**u**th Florida **C**enter for Reducing **C**anc**e**r Di**s**paritie**s** or SUCCESS, is focused on attenuating the excess burden of cervical cancer observed in Little Haiti, Hialeah, and West Perrine. For the past three years, the Jay Weiss team, comprised of diverse academic and community stakeholders, has been working to increase screening opportunity through outreach and education that reflects the unique cultural and linguistic needs of our target communities, and builds upon the assets of our extensive network of community partners. With the support and active participation of such partners, we have played a critical role in over 100 events held throughout Hialeah, Little Haiti, and West Perrine this year alone, and educated an estimated 5,474 people about cervical cancer and the importance of early detection of disease. This study provides an opportunity to extend our impact, and continue our work in our targeted communities.

22) **Sharing of Results with Subjects**

CHWs will notify participants of their test results when they are received. Participants who test negative will be encouraged to follow up with their doctor and rescreen in 36 months, based on the US Preventive Services Task Force (USPSTF) guidelines. Participants whose test results indicate insufficient sample would be asked if they had a hysterectomy. If no, the participant will provide a second sample, and an appointment will be booked by CHW. If answered yes, the HPV lab result will be reported to the Study Manager. Participants who test positive for high-risk strains of HPV will be navigated by the CHW to appropriate follow-up care with our community partners and/or Jackson Memorial Hospital (JMH) within 30 days of receiving the result. JMH is the safety net hospital for Miami-Dade County and provides free and low cost care to indigent and medically underserved individuals in the Miami metropolitan area. The CHWs will work with JMH staff to ensure that women with abnormal findings receive timely follow up. The CHWs will follow up with participants who do not return the kit within 30 days.

23) **Setting**

The CHWs will identify and recruit potential subjects at various community venues that they deem appropriate and at which women tend to congregate. These may include, but are not limited to laundromats, churches, health clinics, and flea markets in Little Haiti, Hialeah, and South Dade.

Mailed specimens will be taken to the Oncogenomic Core Facility at UM Sylvester Comprehensive Cancer Center (SCCC) for high-risk HPV detection and HPV viral genotyping.

24) **Resources Available**

The current research study uses SUCCESS' infrastructure to accomplish study aims and build necessary capacity to support future large scale, community-based interventions to address other areas of cancer disparity. SUCCESS has established Community Advisory Groups (CAGs) in Little Haiti and a steering Community Leadership Board (CLB). The CLB involves representation from members of all CAGs as well as other local experts in cancer prevention and control. The CLB meets quarterly to maximize information exchange between CAGs and also to ensure that key findings are disseminated to the community in a timely and appropriate manner. Additionally, SUCCESS is an active member of the Southeast Florida Cancer Control Collaborative, a group of more than 50 local organizations that collaborate on cancer prevention, education, and patient services, and may provide future opportunities for dissemination and expansion of the pilot intervention.

25) **Confidentiality**

Multiple steps will be taken to guarantee confidentiality. All paper-based surveys and forms will be entered and uploaded using Research Electronic Data Capture (REDCap). All REDCap data is securely hosted by the University of Miami's IT Department. Research IT administers project creation, user account management, and movement of projects from development to production. Authentication is performed via CaneID Authentication Service (CAS), the same institution-wide system used for a variety of applications such as myUM. Other electronic data will be stored in

password-protected files that only Dr. Kobetz and the Study Manager and study staff will be able to access. There are multiple levels of security once placed on the local network. Paper copies will similarly be stored in a locked file drawer that only Study Manager and the Data Manager will be able to access.

All study personnel will be certified to conduct human subjects' research by the University of Miami Institutional Review Board.

All data will be inspected for quality assurance prior to analysis. Prior to performing statistical analyses on quantitative data, the data will be checked, screened and verified. Data checking is critical to ensure the integrity of the database. Range checks will be routinely performed, and random items from the raw data will be checked against the entered data so that mistakes can be identified.

The study investigators and their staff will consider all records confidential to the extent permitted by law. The U.S. Department of Health and Human Services (DHHS) may request to review and obtain copies of any records. Records may also be reviewed for audit purposes by authorized University employees or other agents who are bound by the provisions of confidentiality

26) **Consent Process**

Written Informed consent will be obtained by the CHW at the community venues where participants are being recruited for the study. We will be following the SOP HRP-090 Informed Consent Process for Research when obtaining consent. Consent will be obtained in a private room from women who are eligible and agree to participate after the CHW describes the study. Potential participants will be told that we are conducting a research study to determine the best method to increase rates of cervical cancer screening among women in their community. They will be told that the study will involve a brief education session about cervical cancer prevention and treatment, as well as instructions on how to use the self-sampler we will be providing them with. The informed consent form will include a designated section "optional procedures" for participants to accept or decline biobanking of specimens for future analysis. Participants are given the opportunity to opt out of selected study procedures.

Informed Consent will be provided in English, Spanish, and Creole, based on the participant's language preference.

27) Waiver of Signed Consent

A waiver of signed consent is requested for screening activities. This research presents no more than minimal risk of harm to subjects and involves no procedures for which written consent is normally required outside of the research context.