

St. Joe's Invitation Effectiveness Study NCT04658888
Last approval date 9/22/20



HRP-592 - Protocol for Human Subject Research with Use of Test Article(s)

Protocol Title:

Provide the full title of the study as listed in item 1 on the "Basic Information" page in CATS IRB (http://irb.psu.edu).

Increasing cancer screening among female patients at PHS St. Joe's residency clinic: Letter notifying them about outdated screen and postcard with self-sampling option

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Version Date:

Provide the date of this submission. This date must be updated each time the submission is provided to the IRB office with revisions. DO NOT revise the version date in the footer of this document.

March 18, 2020 September 22, 2020

Clinicaltrials.gov Registration #:

Provide the registration number for this study, if applicable. See "HRP-103- Investigator Manual, When do I have to register my project at ClinicalTrials.gov?" for more information.

NCT04658888

Important Instructions for Using This Protocol Template:

This template is provided to help investigators prepare a protocol that includes the necessary information needed by the IRB to determine whether a study meets all applicable criteria for approval.

1. **GENERAL INSTRUCTIONS:**

- Prior to completing this protocol, ensure that you are using the most recent version by verifying the
 protocol template version date in the footer of this document with the current version provided in the
 CATS IRB Library.
- Do not change the protocol template version date located in the footer of this document.
- Some of the items may not be applicable to all types of research. If an item is not applicable, please indicate as such or skip question(s) if indicated in any of the instructional text.

• GRAY INSTRUCTIONAL BOXES:

- Type your protocol responses <u>below</u> the gray instructional boxes of guidance language. If the section or item is not applicable, indicate not applicable.
- Penn State College of Medicine/Penn State Health researchers: Delete the instructional boxes from the final version of the protocol prior to upload to CATS IRB (http://irb.psu.edu).
- Penn State researchers at all other campuses: Do NOT delete the instructional boxes from the final version of the protocol.
- Add the completed protocol template to your study in CATS IRB (http://irb.psu.edu) on the "Basic Information" page.

2. CATS IRB LIBRARY:

Documents referenced in this protocol template (e.g. SOP's, Worksheets, Checklists, and Templates) can be
accessed by clicking the Library link in CATS IRB (http://irb.psu.edu).

3. **PROTOCOL REVISIONS:**

- When making revisions to this protocol as requested by the IRB, please follow the instructions outlined in the Study Submission Guide available in the Help Center in CATS IRB (http://irb.psu.edu) for using track changes.
- Update the Version Date on page 1 each time revisions are made.

If you need help...

University Park and other campuses:

Office for Research Protections Human Research Protection Program

The 330 Building, Suite 205 University Park, PA 16802-7014 Phone: 814-865-1775

Fax: 814-863-8699 Email: <u>irb-orp@psu.edu</u>

College of Medicine and Penn State Health:

Human Subjects Protection Office

90 Hope Drive, Mail Code A115, P.O. Box 855

Hershey, PA 17033

(Physical Office Location: Academic Support Building

Room 1140)

Phone: 717-531-5687 Email: <u>irb-hspo@psu.edu</u>

2.0 Background 3.0 **Inclusion and Exclusion Criteria** 4.0 **Recruitment Methods Consent Process and Documentation** 5.0 HIPAA Research Authorization and/or Waiver or Alteration of Authorization 6.0 7.0 **Study Design and Procedures Subject Numbers and Statistical Plan** 8.0 9.0 **Data and Safety Monitoring Plan Risks** 10.0 11.0 **Potential Benefits to Subjects and Others** 12.0 **Sharing Results with Subjects** 13.0 **Subject Payment and/or Travel Reimbursements** 14.0 **Economic Burden to Subjects** 15.0 **Resources Available** 16.0 **Other Approvals** 17.0 **Multi-Site Study** 18.0 **Adverse Event Reporting Study Monitoring, Auditing and Inspecting** 19.0 20.0 **Future Undetermined Research: Data and Specimen Banking** 21.0 References 22.0 **Confidentiality, Privacy and Data Management**

Table of Contents

Objectives

1.0

1.0 Objectives

1.1 Study Objectives

Describe the purpose, specific aims or objectives. State the hypotheses to be tested.

The objective of this study is to evaluate the effectiveness of offering self-sampling for high-risk human papillomavirus (HPV) testing in increasing participation in cervical cancer screening.

Specifically, we will determine if women who are out-of-date for cervical cancer screening will be more likely to seek screening if offered the option to complete a self-sampled HPV test compared to standard of care. Eligible patients at Penn State Health St. Joseph (seen through Family and Community Medicine and through Women's Health) who are out-of-date with cervical cancer screening will be randomized to either a control arm or an intervention arm (2:1). Women in the control arm will receive a letter notifying them that they need to be screened and they should contact their primary care provider, according to standard clinical procedures (standard of care). Women in the experimental arm will receive (1) a slightly modified version of this letter informing them of a self-sampling option and (2) a pre-addressed post card to return to the study team if interested in self-sampling. Women who return the post card will then receive, via mail, a self-sampling kit to obtain a cervical sample for an HPV test.

For both arms, women whose cervical cancer screening test (collected by a provider or by the participant herself) indicate the presence of high-risk HPV will be directed to follow-up procedures following standard clinical practice.

Hypothesis: Women notified of a need for cervical cancer screening by letter who are offered self-sampling for cervical cancer screening will have a higher rate of screening that women notified by letter alone.

1.2 Primary Study Endpoints

State the primary endpoints to be measured in the study.

Clinical trials typically have a primary objective or endpoint. Additional objectives and endpoints are secondary. The endpoints (or outcomes), determined for each study subject, are the quantitative measurements required by the objectives. Measuring the selected endpoints is the goal of a trial (examples: response rate and survival).

The primary objective is to test the screening differences in control arm (i.e., receiving the standard reminder letter) versus the intervention arm (i.e., receiving a modified reminder letter plus postcard to request HPV self-sampling kit). The purpose is to assess the impact of mailing HPV home sampling kits to patients in need of cervical cancer screening on HPV screening rates.

The primary end point of 1) Completion of cervical cancer screening 2) Use of home cervical cancer screening kit will be evaluated over a three month time period after reminder letters are mailed.

1.3 Secondary Study Endpoints

State the secondary endpoints to be measured in the study.

The secondary endpoint is overall cervical cancer screening of people mailed a letter.

2.0 Background

2.1 Scientific Background and Gaps

Describe the scientific background and gaps in current knowledge.

For clinical research studies being conducted at Penn State Health/Penn State College of Medicine, and for other non-PSH locations as applicable, describe the treatment/procedure that is considered standard of care (i.e., indicate how patients would be treated in non-investigational setting); and if applicable, indicate if the treatment, drug, or device is available to patient without taking part in the study.

The American Cancer Society estimates that 4,170 women in the United States (US) will die from cervical cancer in 2018. It is possible to prevent many of these deaths through screening (e.g., with the human papillomavirus [HPV] test for cervical cancer) and appropriate follow-up in women with positive screens.¹

The U.S. Preventive Services Task Force (USPSTF) recommends that women ages 30-65 receive cervical cancer screening through (a) Pap testing every 3 years; (b) high-risk HPV testing every 5 years; or (c) Pap and high-risk HPV testing every 5 years². Other organizations, including the American College of Obstetrics and Gynecology and the American Cancer Society³, have different recommendations for the test modalities and intervals. Regardless of the specific measure of up-to-date with cervical cancer screening, rates of screening are suboptimal, and vulnerable subgroups (including women in rural areas, racial/ethnic minorities, women with low socioeconomic status, and women who are underinsured) are even less likely to be screened⁴. Most cases of cervical cancer are detected among women who are out-of-date for screening⁵.

An emerging area of evidence suggests that women can collect their own samples for high-risk HPV testing^{6,7}. Offering self-sampling for HPV testing to women who are out-of-date for screening has been associated with up to 9 times higher rates of screening than a normal reminder letter^{8,9,10}. This method of sample collection finds comparable clinical results as provider collection^{11,12}. In addition, this approach appears to be particularly effective among women who are out-of-date with screening¹³.

Based on this information, self-sampling for HPV testing may be a viable option for cervical cancer screening, particularly among women who do not obtain regular screening in a clinical setting. However, all previous studies have been conducted in a highly-controlled, well-resourced research context. We propose a study using real-world procedures that could pragmatically be adopted in primary care clinics, i.e., evaluating a reminder letter with a post card option to request an HPV self-sampling kit.

2.2 Previous Data

Describe any relevant preliminary data.

Previous studies on HPV self-sampling have found this approach to be appropriate for providing preventive care to underserved communities. One recent study concluded that mailing self-sampling kits to home addresses could be a more effective alternative to reminder letters. ¹⁴ Other studies have demonstrated that HPV self-sampling tests are comparable to clinician-collected samples for HPV screening. ¹⁵

The study team has been involved in many studies on cancer prevention and control and primary care relevant to this proposal. Cancer prevention studies performed by the study team include ongoing studies on acceptability and accuracy of self-sampling. These studies emphasize the urgent need for interventions to improve cervical cancer screening behaviors in vulnerable communities.

2.3 Study Rationale

Provide the scientific rationale for the research.

This pragmatic feasibility study will evaluate whether one method for offering self-sampling for HPV testing (i.e., with a post card to request a mailed kit) will increase cervical cancer screening rates.

3.0 Inclusion and Exclusion Criteria

Create a numbered list below in sections 3.1 and 3.2 of criteria subjects must meet to be eligible for study enrollment (e.g., age, gender, diagnosis, etc.).

Vulnerable Populations:

Indicate specifically whether you will include any of the following vulnerable populations in this research. You MAY NOT include members of these populations as subjects in your research unless you indicate this in your inclusion criteria because specific regulations apply to studies that involve vulnerable populations.

The checklists referenced below outline the determinations to be made by the IRB when reviewing research involving these populations. Review the checklists as these will help to inform your responses throughout the remainder of the protocol.

- Children Review "HRP-416- Checklist Children"
- Pregnant Women Review "HRP-412- Checklist Pregnant Women"
- Cognitively Impaired Adults- Review "HRP-417- Checklist Cognitively Impaired Adults"
- Prisoners- Review "HRP-415- Checklist Prisoners"
- Neonates of uncertain viability or non-viable neonates- Review "HRP-413- Checklist Non-Viable Neonates" or "HRP-414- Checklist Neonates of Uncertain Viability"

[Do not type here]

3.1 Inclusion Criteria

Create a numbered list of the inclusion criteria that define who will be included in your final study sample (e.g., age, gender, condition, etc.)

- Female patients at PSH St. Joe's FCM residency clinic or women's health clinic
- 30-65 years of age
- Out-of-date for cervical cancer screening
- Able to speak, read, and communicate well in English or Spanish
- Not greater than average risk for cervical cancer

3.2 Exclusion Criteria

Create a numbered list of the exclusion criteria that define who will be excluded in your study.

- Pregnant
- Incarcerated
- Greater than average risk for cervical cancer¹⁶
 - o Already diagnosed with high-grade precancerous cervical cancer or cervical lesions
 - Have a compromised immune system
 - With in-utero exposure to diethylstilbestrol

- Unable to speak, read, and communicate well in English or Spanish
- Unable or unwilling to give implied consent or otherwise complete study requirements

3.3 Early Withdrawal of Subjects

3.3.1 Criteria for removal from study

Insert subject withdrawal criteria (e.g., safety reasons, failure of subject to adhere to protocol requirements, subject consent withdrawal, disease progression, etc.).

There are no foreseeable reasons why a study subject might be removed by the investigators from the study. Subjects can voluntarily withdraw from the study at any time and for any reason.

3.3.2 Follow-up for withdrawn subjects

Describe when and how to withdraw subjects from the study; the type and timing of the data to be collected for withdrawal of subjects; whether and how subjects are to be replaced; the follow-up for subjects withdrawn from investigational treatment.

The withdrawal will be documented. Subjects who withdraw will be asked to describe why they are withdrawing so that we may better understand the study population. Withdrawn subjects will not be replaced but all data collected up until the point of withdraw will be included in data analysis.

4.0 Recruitment Methods

- Upload recruitment materials for your study in CATS IRB (http://irb.psu.edu). DO NOT include the actual recruitment wording in this protocol.
- StudyFinder: If StudyFinder (http://studyfinder.psu.edu) is to be used for recruitment purposes, separate recruitment documents do not need to be uploaded in CATS IRB. The necessary information will be captured from the StudyFinder page in your CATS IRB study.
- Any eligibility screening questions (verbal/phone scripts, email, etc.) used when contacting potential participants must be uploaded to your study in CATS IRB (http://irb.psu.edu).

We will use the EHR to identify women who are potentially-eligible for this study. We have developed a way to query to EHR to identify patients at PSH St. Joseph's FCM or Women's Health clinics, ages 30-65, who are out-of-date with cervical cancer screening, and who do not have documentation of disqualifying conditions. This query consists of a set of search parameters that will be entered into the EHR to identify participants who meet eligibility criteria.

4.1 Identification of subjects

Describe the source of subjects and the methods that will be used to identify potential subjects (e.g., organizational listservs, established recruitment databases, subject pools, medical or school records, interactions during a clinic visit, etc.). If not recruiting subjects directly (e.g., database query for eligible records or samples) state what will be queried, how and by whom.

StudyFinder:

o If you intend to use StudyFinder (http://studyfinder.psu.edu) for recruitment purposes, include this method in this section.

o Information provided in this protocol needs to be consistent with information provided on the StudyFinder page in your CATS IRB study.

For Penn State Health submissions using Enterprise Information Management (EIM) for recruitment, and for non-Hershey locations as applicable, attach your EIM Design Specification form on in CATS IRB (http://irb.psu.edu). See "HRP-103- Investigator Manual, What is appropriate for study recruitment?" for additional information. **DO NOT** include the actual recruitment material or wording in this protocol.

Participants will be recruited from St. Joe's FCM or Women's Health clinics that meet inclusion/exclusion criteria. As described in 4.1, we will identify these participants using the EHR.

4.2 Recruitment process

Describe how potential subjects first learn about this research opportunity or indicate as not applicable if subjects will not be prospectively recruited to participant in the research. Subject recruitment can involve various methods (e.g., approaching potential subjects in person, contacting potential subjects via email, letters, telephone, ResearchMatch, or advertising to a general public via flyers, websites, StudyFinder, newspaper, television, and radio etc.). **DO NOT** include the actual recruitment material or wording in this protocol.

[Do not type here]

4.2.1 How potential subjects will be recruited.

Potential participants will receive a letter notifying them that they are out-of-date with cervical cancer screening. Women in the control arm will receive a letter notifying them that they need to be screened and they should contact their primary care provider, according to standard clinical procedures (standard of care). Women in the experimental arm will receive (1) a slightly modified version of this letter informing them of a self-sampling option and (2) a pre-addressed post card to return to the study team if interested in self-sampling. Women who return the post card will then receive, via mail, a self-sampling kit to obtain a cervical sample for an HPV test.

4.2.2 Where potential subjects will be recruited.

PSU St. Joseph's FCM and Women's Health clinics.

4.2.3 When potential subjects will be recruited.

Participants will be continuously recruited from among potentially-eligible patients until the anticipated sample size has been met. Using a 2:1 randomization scheme, we will randomize 807 participants to the control arm and 404 participants to the intervention arm.

4.2.4 Describe the eligibility screening process and indicate whether the screening process will occur before or after obtaining informed consent. Screening begins when the investigator obtains information about or from a prospective participant in order to determine their eligibility. In some studies, these procedures may not take place unless HIPAA Authorization is obtained OR a waiver of HIPAA Authorization when applicable for the screening procedures is approved by the IRB. [For FDA regulated studies, consent for any screening activities would need to be obtained prior to screening unless specifically waived by the IRB.]
We have developed a way to query the EHR to identify patients at PSH St. Joseph's FCM or Women's Health clinics, ages 30-65, who are out-of-date with cervical cancer screening, and who do not have documentation of disqualifying conditions. The screening process will take place prior to the informed consent process.

5.0 Consent Process and Documentation

Refer to the following materials:

- The "HRP-090- SOP Informed Consent Process for Research" outlines the process for obtaining informed consent.
- The "HRP-091— SOP Written Documentation of Consent" describes how the consent process will be documented.
- The "HRP-314- Worksheet Criteria for Approval" section 7 lists the required elements of consent.
- The "HRP-312- Worksheet Exemption Determination" includes information on requirements for the consent process for exempt research. In addition the CATS IRB Library contains consent guidance and templates for exempt research.
- The CATS IRB library contains various consent templates for expedited or full review research that are designed to include the required information.
- Add the consent document(s) to your study in CATS IRB (http://irb.psu.edu). Links to Penn State's consent templates are available in the same location where they are uploaded. **DO NOT** include the actual consent wording in this protocol.

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Ш	Informed consent will be sought and documented with a written consent form [Complete Sections 5.2 and 5.6]
	Implied or verbal consent will be obtained – subjects will not sign a consent form (waiver of written documentation of consent) [Complete Sections 5.2, 5.3 and 5.6]
	Informed consent will be sought but some of the elements of informed consent will be omitted or

ancica (c.g., acception). [complete see	11011 3.2, 3.4 una 3.0j
	request to completely waive the informed concept

Informed consent will not be obtained – request to completely waive the informed consent requirement. [Complete Section 5.5]

5.2 Obtaining Informed Consent

5.2.1 Timing and Location of Consent

Describe where and when the consent process will take place.

altered (e.g. decention) [Complete section 5.2.5.4 and 5.6]

Participants in the intervention arm will receive the HRP-586 along with the self-sampling kit in the mail.

5.2.2 Coercion or Undue Influence during Consent

Describe the steps that will be taken to minimize the possibility of coercion or undue influence in the consent process.

During the screening phone call the study team member will stress that participation in this study is entirely voluntary.

5.3	Waiver	of Written	Documentation	of Consent
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Review "HRP – 411 – Checklist – Waiver of Written Documentation of Consent."

5.3.1	Indicate which of the following conditions applies to this research:
	The research presents no more that minimal risk of harm to subjects and involves no procedures for which written consent is normally required outside of the research context.
(OR
	The only record linking the subject and the research would be the consent document and the principal risk would be potential harm resulting from a breach of confidentiality. Each subject will be asked whether the subject wants documentation linking the subject with the research, and the subject's wishes will govern. (Note: This condition is not applicable for FDA-regulated research. If this category is chosen, include copies of a consent form and /or parental permission form for participants who want written documentation linking them to the research.)
	OR If the subjects or legally authorized representatives are members of a distinct cultural group or community in which signing forms is not the norm, that the research presents no more than minimal risk of harm to subjects and provided there is an appropriate alternative mechanism for documenting that informed consent was obtained. (Note: This condition is not applicable for FDA-regulated research.)
	Describe the alternative mechanism for documenting that informed consent was obtained:
	Participants in the postcard to request HPV self-sampling kit arm of the study will consent the study by sending back their postcards indicating that they want an HPV self-sampling kit.
5.3.2	Indicate what materials, if any, will be used to inform potential subjects about the research (e.g., a letter accompanying a questionnaire, verbal script, implied consent form, or summary explanation of the research)
	The HRP-586 will accompany the self-sampling kit along with instructions on how to use the kit. Contact information for a study team member will be included on the HRP-586 so that participants can ask questions.
	ned consent will be sought but some of the elements of informed consent will be omitted or
	d (e.g., deception).

		Not applicable.
	5.4.3	Describe why the research involves no more than minimal risk to subjects.
		Not applicable.
	5.4.4	Describe why the alteration/omission will not adversely affect the rights and welfare of subjects.
		Not applicable.
	5.4.5	If the research involves using identifiable private information or identifiable biospecimens, describe why the research could not be practicably be carried out without using such information or biospecimens in an identifiable format.
		Not applicable.
	5.4.6	Debriefing Explain whether and how subjects will be debriefed after participation in the study. If subjects
		will not be debriefed, provide a justification for not doing so. Add any debriefing materials to the study in CATS IRB.
		Not applicable.
5.5		ned consent will not be obtained – request to completely waive the informed consent ement
		v "HRP-410-Checklist -Waiver or Alteration of Consent Process" to ensure that you have provided ent information.
	5.5.1	Indicate why the research could not practicably be carried out without the waiver of consent
		Currently, patients do not need to provide informed consent to receive reminders to obtain guideline-recommended clinical procedures. Requiring participants to provide consent would critically reduce the sample size. More importantly, requiring potential participants to consent to receive information about cervical cancer screening could give them the impression that screening is somehow "new" or "experimental," which could lead to patients who are out-of-date with cervical cancer screening to avoid scheduling a screening.
	5.5.2	Describe why the research involves no more than minimal risk to subjects.

5.4.2 Indicate why the research could not practicably be carried out without the omission or

alteration of consent elements

Participants will receive a letter directing them to receive a guideline-recommended procedure that is considered standard of care. These procedures do not post more than minimal risks to subjects.

5.5.3 Describe why the alteration/omission will not adversely affect the rights and welfare of subjects.

The rights and welfare of subjects will be maintained because they will still have the option of determining whether or not they want to schedule a cervical cancer screening.

5.5.4 If the research involves using identifiable private information or identifiable biospecimens, describe why the research could not be practicably be carried out without using such information or biospecimens in an identifiable format.

Our outcomes analysis will assess (1) participation in cervical cancer screening during the follow-up period (yes or no), and (2) whether any follow-up procedures were indicated for that patient. The follow up period will consist of three months after the mailing. We will assess differences in these outcomes for participants who receive the standard of care letter versus a modified letter with an option for HPV self-sampling. If we did not use identifiable health information, we would not be able to link the letter type to clinical outcomes.

5.5.5 Additional pertinent information after participation

Explain if subjects will be provided with additional pertinent information after participation. If not applicable, indicate "not applicable."

Not Applicable.

5.6 Consent – Other Considerations

5.6.1 Non-English-Speaking Subjects

Indicate what language(s) other than English are understood by prospective subjects or representatives.

If subjects who do not speak English will be enrolled, describe the process to ensure that the oral and written information provided to those subjects will be in that language. Indicate the language that will be used by those obtaining consent.

Indicate whether the consent process will be documented in writing with the long form of the consent documentation or with the short form of the consent documentation. Review "HRP-091 –SOP- Written Documentation of Consent" and "HRP-103 -Investigator Manual" to ensure that you have provided sufficient information.

All participants will receive all materials in both English and Spanish.

5.6.2 Cognitively Impaired Adults

Refer "HRP-417 -CHECKLIST- Cognitively Impaired Adults" for information about research involving cognitively impaired adults as subjects.

5.6.2.1 Capability of Providing Consent

Describe the process to determine whether an individual is capable of consent.

Not Applicable.

5.6.2.2 Adults Unable to Consent

Describe whether and how informed consent will be obtained from the legally authorized representative. Describe who will be allowed to provide informed consent. Describe the process used to determine these individual's authority to consent to research.

For research conducted in the state of Pennsylvania, review "HRP-013 -SOP- Legally Authorized Representatives, Children and Guardians" to be aware of which individuals in the state of Pennsylvania meet the definition of "legally authorized representative."

For research conducted outside of the state of Pennsylvania, provide information that describes which individuals are authorized under applicable law to consent on behalf of a prospective subject to their participation in the procedure(s) involved in this research. One method of obtaining this information is to have a legal counsel or authority review your protocol along with the definition of "children" in "HRP-013 - SOP- Legally Authorized Representatives, Children, and Guardians."

Not Applicable.

5.6.2.3 Assent of Adults Unable to Consent

Describe the process for assent of the subjects. Indicate whether assent will be required of all, some or none of the subjects. If some, indicate which subjects will be required to assent and which will not.

If assent will not be obtained from some or all subjects, provide an explanation of why not.

Describe whether assent of the subjects will be documented and the process to document assent. The IRB allows the person obtaining assent to document assent on the consent document and does not routinely require assent documents and does not routinely require subjects to sign assent documents.

Not Applicable.

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

5.6.3.1 Parental Permission

Describe whether and how parental permission will be obtained. If permission will be obtained from individuals other than parents, describe who will be allowed to provide permission. Describe the process used to determine these individual's authority to consent to each child's general medical care.

For research conducted in the state of Pennsylvania, review "HRP-013-SOP- Legally Authorized Representatives, Children and Guardians" to be aware of which individuals in the state of Pennsylvania meet the definition of "children."

For research conducted outside of the state of Pennsylvania, provide information that describes which persons have not attained the legal age for consent to treatments or procedures involved in the research, under the applicable law of the jurisdiction in which research will be conducted. One method of obtaining this information is to have a legal counsel or authority review your protocol along with the definition of "children" in "HRP-013-SOP- Legally Authorized Representatives, Children, and Guardians."

Not Applicable.

5.6.3.2 Assent of subjects who are not yet adults

Indicate whether assent will be obtained from all, some, or none of the children. If assent will be obtained from some children, indicate which children will be required to assent. When assent of children is obtained describe whether and how it will be documented.

Not Applicable.

6.0 HIPAA Research Authorization and/or Waiver or Alteration of Authorization

This section is about the access, use or disclosure of Protected Health Information (PHI). PHI is individually identifiable health information (i.e., health information containing one or more 18 identifiers) that is transmitted or maintained in any form or medium by a Covered Entity or its Business Associate. A Covered Entity is a health plan, a health care clearinghouse or health care provider who transmits health information in electronic form. See "HRP-103 -Investigator Manual" for a list of the 18 identifiers.

If requesting a waiver/alteration of HIPAA authorization, complete sections 6.2 and 6.3 in addition to section 6.1. The Privacy Rule permits waivers (or alterations) of authorization if the research meets certain conditions. Include only information that will be accessed with the waiver/alteration.

[Do not type here]

6.1	Authorization and/or Waiver or Alteration of Authorization for the Uses and Disclosures of PHI				
	Check	c all that apply:			
		Not applicable, no identifiable protected health information (PHI) is accessed, used or disclosed in this study. [Mark all parts of sections 6.2 and 6.3 as not applicable]			
		Authorization will be obtained and documented as part of the consent process. [If this is the only box checked, mark sections 6.2 and 6.3 as not applicable]			
		Partial waiver is requested for recruitment purposes only (Check this box if patients' medical records will be accessed to determine eligibility before consent/authorization has been obtained). [Complete all parts of sections 6.2 and 6.3]			
		Full waiver is requested for entire research study (e.g., medical record review studies). [Complete all parts of sections 6.2 and 6.3]			

Alteration is requested to waive requirement for written documentation of authorization
(verbal authorization will be obtained). [Complete all parts of sections 6.2 and 6.3]

6.2 Waiver or Alteration of Authorization for the Uses and Disclosures of PHI

6.2.1 Access, use or disclosure of PHI representing no more than a minimal risk to the privacy of the individual

6.2.1.1 Plan to protect PHI from improper use or disclosure

Include the following statement as written – DO NOT ALTER OR DELETE unless this section is not applicable because the research does not involve a waiver of authorization. If the section is <u>not</u> applicable, <u>remove</u> the statement and <u>indicate</u> as not applicable.

See the Research Data Plan Review Form.

6.2.1.2 Plan to destroy identifiers or a justification for retaining identifiers

Describe the plan to destroy the identifiers at the earliest opportunity consistent with the conduct of the research. Include when and how identifiers will be destroyed. If identifiers will be retained, provide the legal, health or research justification for retaining the identifiers.

Identifying information will be destroyed after data collection and cleaning is complete.

6.2.2 Explanation for why the research could not practicably be conducted without access to and use of PHI

Provide an explanation for why the research could not practicably be conducted without access to and use of PHI.

Access to PHI is required to identify women who are within the specified age range (30-65 years); out of date with cervical cancer screening; and don't have any of the disqualifying conditions.

Participants who request and return a self-sampling kit are providing their implied consent to collect their research information. Participants who do not request the self-sampling kit are receiving standard

6.2.3 Explanation for why the research could not practicably be conducted without the waiver or alteration of authorization

Provide an explanation for why the research could not practicably be conducted without the waiver or alternation of authorization.

Obtaining informed consent from all participants before accessing their PHI to determine screening status would be infeasible due to the large number of patients who meet inclusion criteria. Receiving a reminder letter about cervical cancer screening is also standard of care for those who are out-of-date, so there would be no reason to consent these patients prior to sending the letter.

6.3 Waiver or alteration of authorization statements of agreement

By submitting this study for review with a waiver of authorization, you agree to the following statement – DO NOT ALTER OR DELETE unless this section is not applicable because the research does not involve a waiver or alteration of authorization. If the section is <u>not</u> applicable, <u>remove</u> the statement and <u>indicate</u> <u>as not applicable</u>.

Not Applicable.

7.0 Study Design and Procedures

Data collection materials that will be seen or used by subjects in your study must be uploaded to CATS IRB (http://irb.psu.edu). **DO NOT** include any actual data collection materials in this protocol (e.g., actual survey or interview questions)

[Do not type here]

7.1 Study Design

Describe and explain the study design.

Invitation letters will be sent out by a study team member to Penn State Health St. Joseph patients who meet the inclusion/exclusion criteria. Participants will receive either (1) a standardized letter informing them that they are out-of-date and should schedule an appointment for their cervical cancer screening (control arm) or (2) a modified version of this letter, plus a pre-addressed postcard to request an HPV self-sampling kit (intervention arm). Kits will be mailed out to those that indicate they want to receive one along with the HRP-586 consent form. Participants will mail self-collected cervical samples to the PSH Hershey lab for processing. A sample is stable for up to 6 months at room temperature: https://www.sciencedirect.com/science/article/pii/S2405852118300089. If we receive test kits returned after that timeframe, we will discard the sample and exclude those results. If negative result, patient will be contacted by a study physician with results. If positive result for low-risk HPV, patient will be contacted by a study physician to schedule a Pap test. If positive result for high-risk HPV, patient will be contacted by a study physician to schedule a colposcopy. Scheduling a Pap or Colposcopy test is standard of care for a low-risk or high-risk HPV result, respectively. The study team will monitor receipt of cervical cancer screening across the two arms.

7.2 Study Procedures

Provide a step by step description of all research procedures being conducted (broken down by visit, if applicable) including such information as below (where and when applicable); describe the following:

- HOW: (e.g., data collection via interviews, focus groups, forms such as surveys and questionnaires, medical/school records, audio/video/digital recordings, photographs, EKG procedures, MRI, mobile devices such as electronic tablets/cell phones, observations, collection of specimens, experimental drug/device testing, manipulation of behavior/use of deception, computer games, etc.)
- WHERE: (e.g., classrooms, labs, internet/online, places of business, medical settings, public spaces, etc.)

[Type protocol text here]

7.2.1 Prior to mailing

Provide a description of what procedures will be performed on visit 1 or day 1 or pre-test in order of how these will be done. If your study only involves one session or visit, use this section only and indicate 7.2.2 as not applicable.

We have developed a way to query to EHR to identify patients at PSH St. Joseph's FCM or Women's Health clinics, ages 30-65, who are out-of-date with cervical cancer screening, and who do not have documentation of disqualifying conditions. After generating this list, we will use REDCap to randomize participants to the control arm or intervention arm (2:1). The study team will then prepare mailings of letters (control arm) or letters with postcards (intervention arm) to send to participants.

7.2.2 Mailings

Provide a description of what procedures will be performed on visit 2 or day 2 or post-test in order of how these will be done. If your study involves more than two sessions or visits replicate this section for each additional session or visit (e.g., 7.2.3, 7.2.4, etc.).

Once participants are randomized, they will then be sent a reminder letter in English and Spanish inviting them to schedule a screening. Participants in the intervention arm will receive a modified version of this letter, as well as a pre-addressed, pre-stamped postcard to request an HPV self-sampling kit.

7.3 Duration of Participation

Describe how long subjects will be involved in this research study. Include the number of sessions and the duration of each session - consider the total number of minutes, hours, days, months, years, etc.

The duration of the participation will be up to three months for active monitoring.

7.4 Test Article(s) (Study Drug(s) and/or Study Device(s))

7.4.1 Description

Provide a brief description of all test articles (drugs (including any foods and dietary supplements), devices and/or biologics used in the research including the purpose of their use and their approval status with the Food and Drug Administration (FDA). Include information about the form of the drug product (e.g., tablets, capsules, liquid).

The Evalyn® Brush is a self-sampling kit that screens for HPV, a leading cause of cancer death among women. This tool has recently been FDA approved, but has not been incorporated into national clinical guidelines. This product is a small pink capped brush that can be used to take a sample of cervical cells.

7.4.2 Treatment Regimen

Describe dose, route of administration and treatment duration. Include information about dose adjustments.

Participants will take a sample of their cervix cells that amounts to a few millimeters of bio specimen.

7.4.3 Method for Assigning Subject to Treatment Groups

Describe the randomization process and how the associated treatment assignment will be made.

Not applicable.

7.4.4 Subject Compliance Monitoring

Insert the procedures for monitoring subject compliance.

Subject compliance will be confirmed once their lab results are received from the Penn State Heath Clinical lab.

7.4.5 Blinding of the Test Article

Describe how the test article is blinded.

Not applicable.

7.4.6 Receiving, Storage, Dispensing and Return

7.4.6.1 Receipt of Test Article

Describe how the test article will be obtained and from what source. Describe how the study test article will be packaged along with amounts (e.g., number of tablets/capsules or volume of liquid) and labeling. If drug kits are used, describe all the contents of the kit and associated labeling.

1 HPV self-sampling kit will be sent to the Penn State Heath Clinical lab in a prepaid mailing. Inside the mailing will be the HPV self-sampling kit with the instructions and a Penn State Heath Clinical lab Pathology Services Special Account Requisition form.

7.4.6.2 Storage

Describe the plans to store, handle the test article so they will be used only on subjects and only by authorized investigators. Describe storage temperature requirements and how temperature will be monitored and recorded.

Before HPV self-sampling kits are sent to study participants, they will be stored in a locked cabinet in the Department of Family and Community Medicine offices at 134 Sipe Ave. Kits mailed to the lab will be disposed of after analysis.

7.4.6.3 Preparation and Dispensing

Describe how the test article will be assigned to each subject and dispensed. Describe the steps necessary to prepare the test article. Include where the test article preparation will be done and by whom. Fully describe how the study treatment is to be administered and by whom.

Before it is sent to the participant, the Penn State Heath Clinical lab Pathology Services Special Account Requisition document will be labeled with the participant's ID #, date of birth, and sex. The Mailing will include the HPV self-sampling kit with the instructions, a summary explanation of research, Penn State Heath Clinical lab Pathology Services Special Account

Page 19 of 34 (V.01/21/2019)

Requisition form. Also, the package will include a prepaid and labeled mailing to send the kit and Pathology Services Special Account Requisition document to the Penn State Heath Clinical lab. Participants will need to include the date and time of sample collection on the Requisition form.

7.4.6.4 Return or Destruction of the Test Article

Describe the procedures for final reconciliation of the test article supply at the end of the study and whether the test article is to be shipped back to a source or destroyed on site.

HPV self-sampling kits will not be returned to participants. The samples will be analyzed and the kits will be destroyed by the Penn State Heath Clinical lab once analysis is complete.

7.4.6.5 Prior and Concomitant Therapy

Describe what prior and/or concomitant medical therapy will be collected. Describe which concomitant medicines/therapies are permitted during the study. Describe which concomitant medicines are not permitted during the study.

Not applicable.

8.0 Subject Numbers and Statistical Plan

8.1 Number of Subjects

Indicate the maximum number of subjects to be accrued/enrolled. Distinguish between the number of subjects who are expected to be enrolled and screened, and the number of subjects needed to complete the research procedures if applicable (i.e., numbers of subjects excluding screen failures.)

The study seeks to have 1,211 participants. There will be 807 participants randomized into the control arm and 404 into the intervention arm.

8.2 Sample size determination

If applicable, provide a justification of the sample size outlined in section 8.1 to include reflections on, or calculations of, the power of the study.

We assume a 15% response rate from the control group, i.e., in response to a standard reminder letter, for a final n=122.¹⁷ We further assume a 30% response rate for the intervention group, i.e., requesting an HPV self-sampling ¹⁸ kit, for a final n=122 for this group. In total, we expect at least 244 participants to respond to their reminders to receive cervical cancer screening.

8.3 Statistical methods

Describe the statistical methods (or non-statistical methods of analysis) that will be employed.

We will calculate the proportion of participants who obtain cervical cancer screening (in the Penn State Health St. Joseph's FCM or Women's Health clinics or with self-collected samples for HPV testing) by arm within three months of the initial mailing. We will use chi-squared tests to compare these proportions, using an alpha of .05 and a beta of 0.80.

9.0 Data and Safety Monitoring Plan

This section is required when research involves more than Minimal Risk to subjects as defined in "HRP-001 SOP- Definitions."

Minimal Risk is defined as the probability and magnitude of harm or discomfort anticipated in the research that are not greater in and of themselves than those ordinarily encountered in daily life or during the performance of routine physical or psychological examinations or tests. For research involving prisoners, Minimal Risk is the probability and magnitude of physical or psychological harm that is normally encountered in the daily lives, or in the routine medical, dental, or psychological examination of healthy persons.

Please complete the sections below if the research involves more than minimal risk to subjects, otherwise indicate each section as not applicable.

[Do not type here]

See the Research Data Plan Review Form

9.1 Periodic evaluation of data

Describe the plan to periodically evaluate the data collected regarding both harms and benefits to determine whether subjects remain safe.

Not applicable.

9.2 Data that are reviewed

Describe the data that are reviewed, including safety data, untoward events, and efficacy data.

Not applicable.

9.3 Method of collection of safety information

Describe the method by which the safety information will be collected (e.g., with case report forms, at study visits, by telephone calls and with subjects).

Not applicable.

9.4 Frequency of data collection

Describe the frequency of data collection, including when safety data collection starts.

Not applicable.

9.5 Individuals reviewing the data

Identify the individuals who will review the data. The plan might include establishing a data and safety monitoring committee and a plan for reporting data monitoring committee findings to the IRB and the sponsor.

Not applicable.

9.6 Frequency of review of cumulative data

Describe the frequency or periodicity of review of cumulative data.

Not applicable.

9.7 Statistical tests

Describe the statistical tests for analyzing the safety data to determine whether harms are occurring.

Not applicable.

9.8 Suspension of research

Describe any conditions that trigger an immediate suspension of research.

Not applicable.

10.0 Risks

List the reasonably foreseeable risks, discomforts, hazards, or inconveniences to the subjects related the subjects' participation in the research. Include as may be useful for the IRB's consideration, a description of the probability, magnitude, duration and reversibility of the risks. Consider all types of risk including physical, psychological, social, legal, and economic risks. Note: Loss of confidentiality is a potential risk when conducting human subject research.

- If applicable, indicate which procedures may have risks to the subjects that are currently unforeseeable.
- If applicable, indicate which procedures may have risks to an embryo or fetus should the subject be or become pregnant.
- If applicable, describe risks to others who are not subjects.

Potential risks associated with these procedures are minimal. Loss of confidentiality is a risk of participation. Participant's personal information will be stored in REDCap, which will be accessible only to study team members that need it.

Participants in the intervention arm who complete cervical cancer screening using a self-collected HPV test only may not necessarily receive a Pap test. There may be concerns that these women will have a missed cancer diagnosis. However, a negative result on an HPV DNA test is better at predicting later disease than a negative result on a Pap test¹⁹. Based on the body of evidence, USPSTF has determined that HPV testing without cotesting with Pap is adequate as a primary cervical cancer screening approach².

There may be some risk involved with the self-sampling kit from the way it is used. Participants can suffer some internal injuries if they do not use the insertion tools properly. The likelihood of these injuries is minimal.

11.0 Potential Benefits to Subjects and Others

11.1 Potential Benefits to Subjects

Describe the potential benefits that individual subjects may experience from taking part in the research. If there is no direct benefit to subjects, indicate as such. Compensation is not considered a benefit. Compensation should be addressed in section 14.0.

The potential benefits to subjects could be the opportunity to get their cancer identified and treated if they decide to participate and take the recommendation to get cervical cancer screening.

11.2 Potential Benefits to Others

Include benefits to society or others.

In the long-term, this study may be a useful way of finding out how best to get under screened patients to receive regular cervical cancer screening and improve screening rates.

12.0 Sharing Results with Subjects

Describe whether results (study results or individual subject results, such as results of investigational diagnostic tests, genetic tests, or incidental findings) will be shared with subjects or others (e.g., the subject's primary care physicians) and if so, describe how information will be shared.

Not Applicable.

13.0 Subject Payment and/or Travel Reimbursements

Describe the amount, type (cash, check, gift card, other) and timing of any subject payment or travel reimbursement. If there is **no** subject payment or travel reimbursement, indicate as not applicable.

Extra or Course Credit: Describe the amount of credit **and** the available alternatives. Alternatives should be equal in time and effort to the amount of course or extra credit offered. It is not acceptable to indicate that the amount of credit is to be determined or at the discretion of the instructor of the course.

Approved Subject Pool: Indicate which approved subject pool will be used; include in response below that course credit will be given and alternatives will be offered as per the approved subject pool procedures.

None.

14.0 Economic Burden to Subjects

14.1 Costs

Describe any costs that subjects may be responsible for because of participation in the research.

None.

14.2 Compensation for research-related injury

If the research involves more than Minimal Risk to subjects, describe the available compensation in the event of research related injury.

If there is no sponsor agreement that addresses compensation for medical care for research subjects with a research-related injury, include the following text as written - DO NOT ALTER OR DELETE: It is the policy of the institution to provide neither financial compensation nor free medical treatment for research-related injury. In the event of injury resulting from this research, medical treatment is available but will be provided at the usual charge. Costs for the treatment of research-related injuries will be charged to subjects or their insurance carriers.

For sponsored research studies with a research agreement with the sponsor that addresses compensation for medical care for research-related injuries, include the following text as written - DO NOT ALTER OR DELETE:

It is the policy of the institution to provide neither financial compensation nor free medical treatment for research-related injury. In the event of injury resulting from this research, medical treatment is available but will be provided at the usual charge. Such charges may be paid by the study sponsor as outlined in the research agreement and explained in the consent form.

Not Applicable.

15.0 Resources Available

15.1 Facilities and locations

Identify and describe the facilities, sites and locations where recruitment and study procedures will be performed.

If research will be conducted outside the United States, describe site-specific regulations or customs affecting the research, and describe the process for obtaining local ethical review. Also, describe the principal investigator's experience conducting research at these locations and familiarity with local culture.

Participants will be recruited through collaboration with St. Joseph's Family and Community Medicine and Women's Health clinics. Participant will be identified through a previously-developed EHR data pull and recruited from their active patient files.

15.2 Feasibility of recruiting the required number of subjects

Indicate the number of potential subjects to which the study team has access. Indicate the percentage of those potential subjects needed for recruitment.

St. Joseph's Family and Community Medicine and Women's Health clinics sees thousands of patients each year. The most recent EHR data pull indicated ~1500 women who met inclusion/exclusion criteria for this study.

15.3 PI Time devoted to conducting the research

Describe how the PI will ensure that a sufficient amount of time will be devoted to conducting and completing the research. Please consider outside responsibilities as well as other on-going research for which the PI is responsible.

The PI will utilize dedicated research time to conduct this research.

15.4 Availability of medical or psychological resources

Describe the availability of medical or psychological resources that subjects might need as a result of their participation in the study, if applicable.

Not Applicable.

15.5 Process for informing Study Team

Describe the training plans to ensure members of the research team are informed about the protocol and their duties, if applicable.

The research team will meet regularly to discuss this study, its procedures, and any issues that may arise.

16.0 Other Approvals

16.1 Other Approvals from External Entities

Describe any approvals that will be obtained prior to commencing the research (e.g., from engaged cooperating institutions IRBs who are also reviewing the research and other required review committees, community leaders, schools, research locations where research is to be conducted by the Penn State investigator, funding agencies, etc.).

This research study is unfunded.

16.2 Internal PSU Committee Approvals

Che	eck all that apply:
	Anatomic Pathology – Penn State Health only – Research involves the collection of tissues or use of pathologic specimens. Upload a copy of "HRP-902 - Human Tissue For Research Form" in CATS IRB.
	Animal Care and Use – All campuses – Human research involves animals and humans or the use of human tissues in animals
	Biosafety – All campuses – Research involves biohazardous materials (human biological specimens in a PSU research lab, biological toxins, carcinogens, infectious agents, recombinant viruses or DNA or gene therapy).
	Clinical Laboratories – Penn State Health only – Collection, processing and/or storage of extra tubes of body fluid specimens for research purposes by the Clinical Laboratories; and/or use of body fluids that had been collected for clinical purposes but are no longer needed for clinical use. Upload a copy of "HRP-901 - Human Body Fluids for Research Form" in CATS IRB.
	Clinical Research Center (CRC) Advisory Committee – All campuses – Research involves the use of CRC services in any way.
	Conflict of Interest Review – All campuses – Research has one or more of study team members indicated as having a financial interest.
	Radiation Safety – Penn State Health only – Research involves research-related radiation procedures. All research involving radiation procedures (standard of care and/or research-related)

intends to hold the IND or IDE.	∍ IND or IDE or
Scientific Review – Penn State Health only – All investigator-written research so review by the convened IRB must provide documentation of scientific review we submission. The scientific review requirement may be fulfilled by one of the follower-review process; (2) department/institute scientific review committee; or (1) the Clinical Research Center Advisory committee. NOTE: Review by the Penn Solnstitute (PSCI) Protocol Review Committee or the PSCI Disease Team is required involves cancer prevention studies or cancer patients, records and/or tissues. For about this requirement see the IRB website.	rith the IRB lowing: (1) external 3) scientific review by tate Health Cancer ed if the study

17.0 Multi-Site Study

If this is a multi-site study (i.e., a study in which two or more institutions coordinate, with each institution completing all research activities outlined in a specific protocol) and the Penn State PI is the lead investigator, describe the processes to ensure communication among sites in the sections below.

[Do not type here]

17.1 Other sites

List the name and location of all other participating sites. Provide the name, qualifications and contact information for the principal investigator at each site and indicate which IRB will be reviewing the study at each site.

Not Applicable.

17.2 Communication Plans

Describe the plan for regular communication between the overall study director and the other sites to ensure that all sites have the most current version of the protocol, consent document, etc. Describe the process to ensure all modifications have been communicated to sites. Describe the process to ensure that all required approvals have been obtained at each site (including approval by the site's IRB of record). Describe the process for communication of problems with the research, interim results and closure of the study.

Not Applicable.

17.3 Data Submission and Security Plan

Describe the process and schedule for data submission and provide the data security plan for data collected from other sites. Describe the process to ensure all engaged participating sites will safeguard data as required by local information security policies.

Not Applicable.

17.4 Subject Enrollment

Describe the procedures for coordination of subject enrollment and randomization for the overall project.

Not Applicable.

17.5 Reporting of Adverse Events and New Information

Describe how adverse events and other information will be reported from the clinical sites to the overall study director. Provide the timeframe for this reporting.

Not Applicable.

17.6 Audit and Monitoring Plans

Describe the process to ensure all local site investigators conduct the study appropriately. Describe any on-site auditing and monitoring plans for the study.

Not Applicable.

18.0 Adverse Event Reporting

18.1 Adverse Event Definitions

For drug studies, inc	corporate the following definitions into the below responses, as written:
Adverse event	Any untoward medical occurrence associated with the use of the drug in
	humans, whether or not considered drug related
Adverse reaction	Any adverse event caused by a drug
Suspected adverse	Any adverse event for which there is a reasonable possibility that the drug
reaction	caused the adverse event. Suspected adverse reaction implies a lesser degree
	of certainty about causality than "adverse reaction".
	 Reasonable possibility. For the purpose of IND safety reporting,
	"reasonable possibility" means there is evidence to suggest a causal
	relationship between the drug and the adverse event.
Serious adverse	Serious adverse event or Serious suspected adverse reaction: An adverse event
event or Serious	or suspected adverse reaction that in the view of either the investigator or
suspected adverse	sponsor, it results in any of the following outcomes: Death, a life-threatening
reaction	adverse event, inpatient hospitalization or prolongation of existing
	hospitalization, a persistent or significant incapacity or substantial disruption
	of the ability to conduct normal life functions, or a congenital anomaly/birth
	defect. Important medical events that may not result in death, be life-
	threatening, or require hospitalization may be considered serious when, based
	upon appropriate medical judgment, they may jeopardize the patient or
	subject and may require medical or surgical intervention to prevent one of the
116. 16	outcomes listed in this definition.
Life-threatening	An adverse event or suspected adverse reaction is considered "life-
adverse event or	threatening" if, in the view of either the Investigator (i.e., the study site
life-threatening	principal investigator) or Sponsor, its occurrence places the patient or research
suspected adverse	subject at immediate risk of death. It does not include an adverse event or
reaction	suspected adverse reaction that had it occurred in a more severe form, might have caused death.
Unexpected	An adverse event or suspected adverse reaction is considered "unexpected" if
adverse event or	it is not listed in the investigator brochure, general investigational plan, clinical
Unexpected	protocol, or elsewhere in the current IND application; or is not listed at the
suspected adverse	specificity or severity that has been previously observed and/or specified.
reaction.	

For device studies, incorporate the following definitions into the below responses, as written:

Unanticipated
adverse device
effect

Any serious adverse effect on health or safety or any life-threatening problem or death caused by, or associated with, a device, if that effect, problem, or death was not previously identified in nature, severity, or degree of incidence in the investigational plan or IDE application (including a supplementary plan or application), or any other unanticipated serious problem associated with a device that relates to the rights, safety, or welfare of subjects.

18.2 Recording of Adverse Events

Address the frequency and process for eliciting adverse event information from research subject, e.g., "Research subjects will be routinely questioned about adverse events at study visits."

In the response, incorporate the following as written:

All adverse events (serious or non-serious) and abnormal test findings observed or reported to study team believed to be associated with the study drug(s) or device(s) will be followed until the event (or its sequelae) or the abnormal test finding resolves or stabilizes at a level acceptable to the investigator.

An abnormal test finding will be classified as an adverse event if one or more of the following criteria are met:

- The test finding is accompanied by clinical symptoms
- The test finding necessitates additional diagnostic evaluation(s) or medical/surgical intervention; including significant additional concomitant drug treatment or other therapy NOTE: Simply repeating a test finding, in the absence of any of the other listed criteria, does not constitute an adverse event.
- The test finding leads to a change in study drug dosing or discontinuation of subject participation in the clinical research study
- The test finding is considered an adverse event by the investigator.

All adverse events (serious or non-serious) and abnormal test findings observed or reported to study team believed to be associated with the study drug(s) or device(s) will be followed until the event (or its sequelae) or the abnormal test finding resolves or stabilizes at a level acceptable to the investigator.

An abnormal test finding will be classified as an adverse event if one or more of the following criteria are met:

- The test finding is accompanied by clinical symptoms
- The test finding necessitates additional diagnostic evaluation(s) or medical/surgical intervention; including significant additional concomitant drug treatment or other therapy
 NOTE: Simply repeating a test finding, in the absence of any of the other listed criteria, does not constitute an adverse event.
- The test finding leads to a change in study drug dosing or discontinuation of subject participation in the clinical research study
- The test finding is considered an adverse event by the investigator.

18.3 Causality and Severity Assessments

By submitting this study for review, you agree to the following statement – DO NOT ALTER OR DELETE:

The investigator will promptly review documented adverse events and abnormal test findings to determine 1) if the abnormal test finding should be classified as an adverse event; 2) if there is a reasonable possibility that the adverse event was caused by the study drug(s) or device(s); and 3) if the adverse event meets the criteria for a serious adverse event.

If the investigator's final determination of causality is "unknown and of questionable relationship to the study drug(s) or device(s)", the adverse event will be classified as associated with the use of the study drug(s) or device(s) for reporting purposes. If the investigator's final determination of causality is "unknown but not related to the study drug(s) or device(s)", this determination and the rationale for the determination will be documented in the respective subject's case history.

18.4 Reporting of Adverse Reactions and Unanticipated Problems to the FDA.

18.4.1 Written IND/IDE Safety Reports

For a drug study under an IND, incorporate the following from 21 CFR 312.32 as written – DO NOT ALTER OR DELETE:

The Sponsor-Investigator will submit a written IND Safety Report (i.e., completed FDA Form 3500A) to the responsible new drug review division of the FDA for any observed or volunteered adverse event that is determined to be a serious and unexpected, suspected adverse reaction. Each IND Safety Report will be prominently labeled, "IND Safety Report", and a copy will be provided to all participating investigators (if applicable) and sub-investigators.

Written IND Safety Reports will be submitted to the FDA as soon as possible and, in no event, later than 15 calendar days following the Sponsor-Investigator's receipt of the respective adverse event information and determination that it meets the respective criteria for reporting.

For each written IND Safety Report, the Sponsor-Investigator will identify all previously submitted IND Safety Reports that addressed a similar suspected adverse reaction experience and will provide an analysis of the significance of newly reported, suspected adverse reaction in light of the previous, similar report(s) or any other relevant information.

Relevant follow-up information to an IND Safety Report will be submitted to the applicable review division of the FDA as soon as the information is available and will be identified as such (i.e., "Follow-up IND Safety Report").

If the results of the Sponsor-Investigator's follow-up investigation show that an adverse event that was initially determined to not require a written IND Safety Report does, in fact, meet the requirements for reporting; the Sponsor-Investigator will submit a written IND Safety Report as soon as possible, but in no event later than 15 calendar days, after the determination was made.

For a device study under an IDE, incorporate the following from 21 CFR 812.150 as written – DO NOT ALTER OR DELETE:

The Sponsor-Investigator will submit a completed FDA Form 3500Ato the FDA's Center for Devices and Radiological Health for any observed or volunteered adverse effect that is determined to be an unanticipated adverse device effect. A copy of this completed form will be provided to all participating sub-investigators.

The completed FDA Form 3500Awill be submitted to the FDA as soon as possible and, in no event, later than 10 working days after the Sponsor-Investigator first receives notice of the adverse effect.

If the results of the Sponsor-Investigator's follow-up evaluation show that an adverse effect that was initially determined to not constitute an unanticipated adverse device effect does, in fact, meet the requirements for reporting; the Sponsor-Investigator will submit a completed FDA Form 3500Aas soon as possible, but in no event later than 10 working days, after the determination was made.

For each submitted FDA Form 3500A, the Sponsor-Investigator will identify all previously submitted reports that that addressed a similar adverse effect experience and will provide an analysis of the significance of newly reported adverse effect in light of the previous, similar report(s).

Subsequent to the initial submission of a completed FDA Form 3500A, the Sponsor-Investigator will submit additional information concerning the reported adverse effect as requested by the FDA.

Not Applicable.

18.4.2 Telephoned IND Safety Reports – Fatal or Life-threatening Suspected Adverse Reactions

For a drug study under an IND, incorporate the following from 21 CFR 312.32 into the response, as written:

In addition to the subsequent submission of a written IND Safety Report (i.e., completed FDA Form 3500A), the Sponsor-Investigator will notify the responsible review division of the FDA by telephone or facsimile transmission of any unexpected, fatal or life-threatening suspected adverse reaction.

The telephone or facsimile transmission of applicable IND Safety Reports will be made as soon as possible but in no event later than 7 calendar days after the Sponsor-Investigator's receipt of the respective adverse event information and determination that it meets the respective criteria for reporting.

Not Applicable.

18.5 Reporting Adverse Reactions and Unanticipated Problems to the Responsible IRB

By submitting this study for review, you agree to the following statement – DO NOT ALTER OR DELETE:

In accordance with applicable policies of The Pennsylvania State University Institutional Review Board (IRB), the investigator will report, to the IRB, any observed or reported harm (adverse event) experienced by a subject or other individual, which in the opinion of the investigator is determined to be (1) unexpected; and (2) probably related to the research procedures. Harms (adverse events) will be submitted to the IRB in accordance with the IRB policies and procedures.

18.6 Unblinding Procedures

Describe the procedures for unblinding study therapy on a subject, including documentation of this in the subject's source document. Include example(s) here why someone might unblind a study. In most cases, the unblinding will be part of managing a serious adverse reaction and will be reported with the serious adverse event. However, in cases where unblinding was not associated with a serious adverse event, such actions should be reported in a timely manner.

Not Applicable.

18.7 Stopping Rules

In studies with a primary safety endpoint or studies with high risk to study subjects, provide the rules that define the circumstances and procedures for interrupting or stopping the study. If an independent Data and Safety Monitoring (DSMB) or Committee (DSMC) is set up for the study, the same stopping rules should be incorporated into the safety analysis plan as well.

Not Applicable.

19.0 Study Monitoring, Auditing and Inspecting

19.1 Study Monitoring Plan

19.1.1 Quality Assurance and Quality Control

Include this section if FDA regulations apply to this study (see "WORKSHEET: Drugs (HRP-306)" and "WORKSHEET: Devices (HRP-307)". HRP-306 and HRP-307 can be accessed by clicking the Library link in CATS IRB (http://irb.psu.edu).

Describe how you will ensure that this study is conducted and that the data are generated, documented (recorded) and reported in compliance with this protocol, with institutional and IRB policies, with Good Clinical Practice guidelines and any other applicable regulatory requirements.

Indicate who is responsible for monitoring the conduct of the study and specify how often the study will be monitored.

For single-site studies with low risk, it may be appropriate for the principal investigator to monitor the study.

For multi-center studies or single site studies involving significant risk, an independent monitor may be required (e.g., monitoring by the staff of the PSU quality assurance program office(s) or by a clinical research organization).

A co- investigator will monitor the study every few months.

19.1.2 Safety Monitoring

Include this section if FDA regulations apply to this study (see "WORKSHEET: Drugs (HRP-306)" and "WORKSHEET: Devices (HRP-307)". HRP-306 and HRP-307 can be accessed by clicking the Library link in CATS IRB (http://irb.psu.edu).

Indicate the process for identifying, recording and reporting adverse events.

Specify roles for adverse event recording and monitoring. Indicate each staff member's role in the adverse event reporting process. Include the following if applicable:

The **Principal Investigator** will confirm that all adverse events (AE) are correctly entered into the AE case report forms by the coordinator; be available to answer any questions that the coordinators may have concerning AEs; and will notify the IRB, FDA, sponsor and/or DSMB of all applicable AEs as appropriate. All assessments of AEs will be made by a licensed medical professional who is an investigator on the research.

The **Research Coordinator** will complete the appropriate report form and logs; assist the PI to prepare reports and notify the IRB, FDA and/or DSMB of all Unanticipated Problems/SAE's.

The **Monitor** will confirm that the AEs are correctly entered into the case report forms. The Monitor will also confirm that the adverse events are consistent with the source documents and are reported to the appropriate regulatory bodies as required.

The Principal Investigator will confirm that all adverse events (AE) are correctly entered into the AE case report forms by the coordinator; be available to answer any questions that the coordinators may have concerning AEs; and will notify the IRB, FDA, sponsor and/or DSMB of all applicable AEs as appropriate. All assessments of AEs will be made by a licensed medical professional who is an investigator on the research.

The Research Coordinator will complete the appropriate report form and logs; assist the PI to prepare reports and notify the IRB, FDA and/or DSMB of all Unanticipated Problems/SAE's.

The Monitor will confirm that the AEs are correctly entered into the case report forms. The Monitor will also confirm that the adverse events are consistent with the source documents and are reported to the appropriate regulatory bodies as required.

20.0 Future Undetermined Research: Data and Specimen Banking

If this study is collecting **identifiable** data and/or specimens that will be banked for future **undetermined research**, please describe this process in the sections below. This information should not conflict with information provided in section 22 regarding whether or not data and/or specimens will be associated with identifiers (directly or indirectly). If **NOT applicable**, indicate as such below in all sections.

[Do not type here]

20.1 Data and/or specimens being stored

Identify what data and/or specimens will be stored and the data associated with each specimen.

Not applicable.

20.2 Location of storage

Identify the location where the data and/or specimens will be stored.

Not applicable.

20.3 Duration of storage

Identify how long the data and/or specimens will be stored. If data and/or specimens will be stored indefinitely, indicate as such.

Not applicable.

20.4 Access to data and/or specimens

Identify who will have access to the data and/or specimens.

Not applicable.

20.5 Procedures to release data or specimens

Describe the procedures to release the data and/or specimens, including: the process to request a release, approvals required for release, who can obtain data and/or specimens, and the data to be provided with the specimens.

Not applicable.

Describe the process for returning results about the use of the data and/or specimens.

Participants will be instructed on what to do with their self-sampling kits when they receive the kit.

21.0 References

List relevant references in the literature which highlight methods, controversies, and study outcomes.

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- 11. Arbyn Marc, Smith Sara B, Temin Sarah, Sultana Farhana, Castle Philip. Detecting cervical precancer and reaching underscreened women by using HPV testing on self samples: updated meta-analyses BMJ 2018; 363:k4823
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