

Title: STAMP (STI self-swab Testing At the time of telemed Medication abortion Provision)

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Abbreviations:

- STI: sexually transmitted infection
- GC: Gonorrhea
- CT: Chlamydia

Section I: Purpose and Background

1. Specific aims and objectives

This project aims to improve access to primary care by assessing the utilization, acceptance, and feasibility of a self-collected STI screening service at the time of telemedicine medication abortion provision.

Primary Outcomes

- Assess the acceptability, feasibility, and utilization of self-collected STI screening at the time of telemedicine medication abortion provision

Secondary Outcomes

- Assess the positivity rate of GC and CT infections in our participants compared to the positivity rates of GC/CT in patients seeking in-clinic abortion care
- Assess the rate of uptake of self-swab collection for STI testing compared to that of the in-clinic population of patients seeking abortion care
- Measure the time elapsed between test result and prescription for treatment for patients who have a positive test for STI.

2. Background, significance, and rationale

Abortions are an essential and commonly utilized aspect of reproductive healthcare; it is estimated that one in every four (24.7%) pregnant-capable individuals will have an abortion by the time they reach 45 years of age.¹ The Supreme Court’s *Dobbs v. Jackson Women’s Health Organization* decision, which overturned the federal protections for abortion previously established through the *Roe vs. Wade* decision, has led to drastic changes in the scope and accessibility of abortion care across the United States,² particularly in states with restrictive laws on abortion. Restricting abortion access has also been associated with other adverse health outcomes, such as an increase in the prevalence of STI rates.³

As many reproductive-aged females report sexual and reproductive health (SRH) clinics as their primary site for accessing healthcare services in general,^{4,5} offering a mix of health screening services, such as STI testing and cervical cancer screening at the time of abortion care may help to increase accessibility and usage of these services. Additionally, as it has been previously shown that patients who seek abortion care

have higher rates of STIs compared to the general population,⁶ routinely offering STI screening to patients receiving abortion care may help to improve diagnosis and treatment in this at-risk population by diagnosing and treating asymptomatic patients in a timely manner.⁷

For abortion care in Hawai'i, telemedicine services are well-established, and have been vital in providing access to areas with a paucity of abortion providers. Previously, patients were required to fly to O'ahu, Maui, or Hawai'i island to access abortion services.⁸ Currently, approximately one-third of abortion services provided in Hawai'i are provided through telemedicine services.⁹ The Options Center, located at the Queens Medical Center on O'ahu, is the one of the largest providers and referral centers for abortions in the state,¹⁰ providing both medication abortions (via telehealth and in-person visits) and outpatient aspiration procedures for abortion. During in-person visits, STI screening, either through self-collected or physician-collected specimen, is routinely offered according to the CDC guidelines for STI screening.¹¹ However, due to the inability to perform a physical exam during telemedicine visits, our clinic does not currently offer STI testing during telemedicine abortion consultation.

Self-collected STI testing (including testing for gonorrhea, chlamydia, and trichomonas) has been shown to have comparable rates of sensitivity and specificity to physician-collected swabs.¹² Previous studies have also demonstrated that patients find self-swabbing for STI testing acceptable and favorable.¹³ In one prospective study, patients who opted for home-based, self-collected STI testing were more likely to complete STI testing than a clinic-based cohort.¹⁴ By offering patients the option to self-collect swabs for STI testing at the time of telemedicine abortion, we can help to improve accessibility of these services for these patients.

3. Preliminary studies

Previous studies assessing the acceptability and feasibility of STI testing and treatment delivered through telemedicine consultation have shown promising results. In one study conducted by Sullivan et al,¹⁵ participants expressed high levels of acceptability of at-home, self-collection for STI testing compared to previous methods used. Additionally, there was a high rate (96%) of returned specimens, with 99.4% of returned specimens found to be adequate for processing. In a separate study that looked at electronic delivery of STI education, testing, and treatment, although return rates of swab collection kits were lower (67%), participants expressed acceptability of telemedicine STI services, with 80% reporting preference for telemedicine services over in-clinic services for future STI services.¹⁶

Currently, there have been no studies done in the United States examining STI testing at the time of telemedicine medication abortion provision. Additionally, none of the major providers of telemedicine abortion in Hawai'i currently offer self-swab STI testing as a concurrent service, which creates a gap in care for telemedicine abortion patients.

Section II: Criteria for Subject Selection

1. Number of subjects

We will enroll a total of 75 subjects for this study. The guidance for determining sample sizes in pilot studies assessing feasibility¹⁷ recommends 70-100 subjects, which will allow analysis for correlation between variables without sacrificing significant confidence intervals. Additionally, in a very similar feasibility study assessing a telehealth STI intervention for same-sex male couples,¹⁵ the sample comprised of 50 couples, with samples collected from 100 study subjects.

For the contemporaneous, in-clinic population that will serve as the control group, all charts for patients who receive medication abortion from 4/30/25 (or whenever the intervention group begins enrollment) - 4/30/26 (or whenever the intervention group concludes enrollment) will be reviewed.

2. Demographics of subjects

Intervention group: Patients who undergo screening and are found to meet inclusion criteria will be invited to participate in this study.

Inclusion Criteria

1. Patients of the Queen's Medical Center POB1 1004 clinic seeking telemedicine medication abortion.
2. Patients for whom, according to the CDC guidelines for STI Testing¹¹, STI testing is indicated (Appendix A), or patients who desire STI screening
3. Age 14 and over
4. Can speak and read English
5. Have an individual, personal email account and mobile phone with text message and internet capabilities for receiving survey links
6. Displays capacity for informed consent

Exclusion Criteria

1. Home address that is not located in the state of Hawai'i
2. Incarcerated
3. Unwilling to perform vaginal swab collection

Retrospective chart review group (control):

The inclusion and exclusion criteria for the control group will be the same as above, with the exception that patients will be seeking medication abortion in-person, and will not need to perform vaginal swab collection at home. A home address is not required as they will receive their medications and testing in clinic at the time of visit. Additionally, they will be seeking in-person rather than telemedicine medication abortion.

For the secondary outcome of comparing STI positivity rates, since we are looking to see overall positivity rates of our in-clinic vs telehealth population, we will compare all methods of STI testing (clinician swab, self-swab, urine) for our in-clinic population to our self-swab telehealth group. As displayed in previous validation studies, sensitivity and specificity between self-collected swabs and physician-collected swabs for STI testing are not significantly different.¹⁴ Similarly, since we are looking to see the uptake of STI-testing as a service (with self-swab being the only feasible option for telehealth patients), we will look at all methods of STI testing when comparing uptake of testing between the two groups.

Vulnerable Subjects

Minors

Minors ought to be able to consent for their own participation in research studies if they are able to consent to the corresponding medical care being provided, so long as the participant does not encounter more than minimal risk that individuals may assume on their own.¹⁹ As minors in the state of Hawai'i are able to consent independently for all STI services beginning at the age of 14,²⁰ they too should be allowed

to consent independently for a study which provides them access to STI testing. When separated by age group, adolescents aged 15 to 19 years old have the second highest rates of gonorrhea and chlamydia in the state of Hawai'i.²¹ Precluding this population from our study would potentially lead to missed screening opportunities for members of an at-risk population.

As self-collected swabs are widely available for STI testing both in clinics and online and have shown to yield reliable results,¹² STI testing through participation in this study does not differ from the standard of care or incur more than minimal risk for participants.

Pregnant patients

Although we will be recruiting patients who are pregnant at the time of initial visit, as they are seeking abortion care, they are choosing to end their pregnancy and thus can make informed choices without being subject to undue influence. Additionally, the services being provided as part of this study are completely optional and in addition to abortion care services, and will not affect the patient's ability to receive abortion care.

Section III: Methods and Procedures

1. Study design and methods:

This is an explorative pilot study that will assess the accessibility, feasibility, and utilization of a new intervention: at-home, self-collected STI testing at the time of medication abortion received through telemedicine services.

The study will take place within the Queen's POB 1 1004 clinic, with the study population consisting of patients who utilize telemedicine services for medication abortion consultations and a chart review of comparison group of patients seen for in-clinic medication abortion during a contemporaneous period.

Patients in the telehealth group may be physically based on any of the Hawaiian Islands, but must have internet access for telehealth services. During the initial telemedicine consultation for medication abortion, the patient will be screened for eligibility using the eligibility criteria described as above. If a patient is eligible for the study, they will be asked if they would like to be enrolled in the study in order to perform STI testing via self-collection. If they do not wish to participate in the study, resources for alternative ways to get STI testing will be provided to them.

If the patient expresses interest in the study, at the conclusion of their telemedicine visit for abortion care, they will be redirected to a separate telephone visit, to take place between the patient and the research associate. The research associate will describe the study in further detail and obtain informed consent if the patient still wishes to proceed. Patients may sign consent forms via Adobe e-sign, a secure digital platform. Adobe e-sign will be accessed via a computer on the Queens Medical Campus. The password-protected consent form will be sent via Adobe e-sign to the patient's email where they will sign it. The signed consent form is unable to download via email. The only way to access the password-protected, signed consent form is via an account for Adobe e-sign that is only accessible to the researcher who sent the consent form to the patient for signature. Only one device will have the electronic consent form for patients to read and sign. E-consent forms will be deleted in their electronic format and printed from a Queens Medical Center printer and stored in a locked cabinet in a locked office in a locked building on Queens Medical Center. The patients will receive an emailed copy of their informed consent form once it has been electronically signed.

Once informed consent has been obtained, the patient will fill out Part I of the intervention survey via text message link (Appendix E). The research associate will then do a short teaching session that reviews the following points with participants:

1. Contents of the specimen collection kit (Appendix B), which will include written instructions for specimen collection (Appendix C)
2. How to collect the specimen (this may be done with illustrative models) and how to handle the specimen once it has been collected. This will include instructions on how to place the swab in the collection tube containing buffer solution, and how to send the swab to the lab. Patients will be instructed to collect their specimens for STI testing prior to taking their medications for medication abortion, in order to improve the ease of collection.
3. Verifying that patients are willing to receive a survey following specimen receipt via text message, and that they have a working mobile phone number.
4. Verifying that they accept receiving positive test results by phone.
5. Asking if, and how, patients would like to be notified of negative test results.

Patient information will be de-identified and connected to a unique Study ID. This study ID will label all specimens that patients send in the mail. All identifiable information, including signed consent forms, will be stored in a password protected and encrypted computer in the PI's research office at QMC. Only the PI and Dr. Tschann will have access to the identifiable information. Jessica Ingersoll, who will be oversee analysis at the Emory Labs using specimens prelabeled with the study ID, will not have access to participant PHI.

The specimen collection kit will be included within the medication abortion kits, which are mailed to patients using a USPS bubble mailer. The patients will be able to locate their package by using a USPS tracking number once the kits have been mailed to them. Within the mailer, collection instructions and a prepaid envelope to send the specimens for processing will also be included. No PHI will be included in the specimen collection kit; all study materials sent to the laboratory for processing will be labeled only with the patient's study ID number.

Once the medication abortion kit and swab collection kit have been received, patients can perform self-swab collection and send their specimen to the processing lab using the prepaid envelope provided for them. All specimens will be processed at the Emory Clinical Labs in Atlanta, GA. Please see Appendix D for a copy of the reporting forms that will be used for specimen processing. Once the lab has confirmed specimen receipt, the participant will receive a link via text message or email from the study team at QMC to a survey that assesses the acceptability and feasibility of the self-swab service (Appendix E). This is a modified version of a validated survey that is used assess acceptability feasibility of telehealth-based interventions.¹⁸ The survey will also collect limited and non-identifiable demographic information. There will be a free-text portion at the end for patients to input any additional feedback regarding the intervention.

It will be reported by the lab staff to the PI if a submitted specimen is deemed inadequate for processing. Once STI tests have been processed, the results will be emailed back to the research team using secure QMC email. All results sent through email will be deidentified, using only the patient's study ID number to identify the results. Once the research team has received the results, they will be reported to the patient and scanned into the patient's electronic medical record. Patients will be able to access this through the "Document Center" section of their MyChart app. Based on previous experiences from the Queen's IT and Medical Records departments, this section of MyChart is not visible to parents with proxy access and thus should not be visible to parents unless shown by the patient themselves. In order to add an extra layer of security, adolescent patients will have the option to get their test results sent to them via encrypted email. All positive test results will still be reported to the Department of Health.

If the lab staff does not receive a specimen from the patient prior to the patient's scheduled follow-up appointment after medication abortion (typically scheduled 1-2 weeks after the initial consultation), the participant will be asked during the follow-up visit if they still desire or intend to send in a specimen, and reminded of the self-swab instructions if they express an intention to still complete the testing. If the patient does not attend her follow-up visit, one attempt will be made to contact her regarding specimen collection on the day of the scheduled appointment via phone call. If the patient does not respond when attempting to contact her, no further attempts at contact will be made.

All patients who have a positive test result will be notified and provided options for treatment as soon as the result is made available to the research team. Patients may opt to receive negative test results via phone call (with option to approve leaving a detailed message on voicemail or not), myChart or text message, or opt out of receiving updates about negative test results.

2. Data analysis and monitoring:

Data analysis will be performed for each outcome being measured as follows:

Primary Outcomes

- Acceptability will be measured using a modified version of the Digital Health Acceptability Questionnaire (DHAQ) which is a validated survey that is used to assess acceptability and feasibility of telehealth-based interventions. The first five questions (1-5) are validated to assess attitude toward the service as a means to address healthcare needs, while the second five questions (6-10) address individual capacity and effort to use the telehealth intervention. A copy of this survey can be found in Table A. This is a 10 question survey of Likert scales from 1 to 5, with 1 being "Strongly Disagree" and 5 being "Strongly Agree".
 - We will calculate median and IQR across the domains of the DHAQ to determine a median acceptability score
 - Three total scores will be calculated:
 - The acceptability score, which will be calculated using the scores from questions 1-5
 - The feasibility score, which will be calculated using scores from questions 6-10
 - The composite score, which will combine the first two scores to calculate overall acceptability and feasibility of the intervention¹⁵
- Feasibility will be measured using multiple factors, in accordance with guidelines put forth by Teresi et al¹⁶ for feasibility pilot studies:
 - Participants' answers from the modified DHAQ relating to the ease of service (6-10, as above)
 - The percentage of returned specimens that are adequate for processing will be reported as a measure of feasibility
- Utilization rates will be reported as a percentage. Both enrollment in the study, as well as utilization of the actual STI testing services, will be reported as a measure of utilization. The former will be reported as the percentage of eligible patients who chose to enroll in the study, while the latter will be reported as the percentage of enrolled patients who submitted samples for STI testing.

Secondary Outcomes

- Comparison of uptake and STI positivity rates between the telehealth and in-clinic population

- Once enrollment is complete for the telemedicine patient-recruitment, we will conduct a chart review of contemporaneous patients seen in-clinic for medication abortion, assessing for the percentage of patients who were offered and accepted STI testing, as well as for the positivity rates of chlamydia, gonorrhea, and trichomonas in this population. We will abstract information about patient demographics (age, race/ethnicity, and island of residence), gestational age, pregnancy history, STI testing, and STI infection (see Appendix E). In order to do this, a HIPAA waiver is requested to perform a retrospective chart review on all patients who received in-clinic abortion care in the same timeframe as the study.
- Time to treatment
 - For every patient who tests positive for an STI, we will measure the amount of time it takes from the time the patient is notified of their positive test result until the time the patient is sent treatment in the mail (chlamydia), or until a prescription for treatment is sent to the patient's pharmacy of choice (gonorrhea or trichomonas). The times will be reported as a range, as well as analyzed using measures of central tendency.

3. *Data storage, security, and confidentiality:*

Patient information will be de-identified and connected to a unique Study ID. A codebook linking the patient's MRN and unique Study ID will be stored in a password protected and encrypted computer in the PI's research office at QMC. This study ID will be the only identifier used on all study-related material that is sent to the patient or the lab for processing.

The signed consent forms will also be stored in a locked cabinet in the PI's research office at QMC, in a folder located in a locked office. Only the research team will have access to identifiable information on an as-needed basis. Emory Labs will not have access to participant PHI.

4. *Transition from research participation (if applicable):*

Not applicable

5. *Study timeline:*

Data collection will begin as soon as the first subject is enrolled and will continue until after the last subject's STI testing has resulted. We hope for the total timeline to be approximately 1 year, which allows for time for data analysis, retrospective chart review of the comparison group, and write-up of the intervention results.

Projected timeline is as follows:

- February 2025: IRB Approval received
- April 2025 – April 2026: Participant Recruitment and Data Collection
- April 2026: Data Analysis
- April 2026 - May 2025: Report Writing
- May 2026: Thesis Presentation, submission of findings for presentation at national meetings

Section IV: Risk/Benefit Assessment

1. *Risk category (Minimal or Greater than Minimal):*

This study poses minimal risk to the patient.

2. *Potential risk(s):*

- a. There is minimal risk that the privacy of the patient's medical information could be breached.
- b. There is minimal risk that the patient could injure themselves during swab collection. In a study performed to assess the sensitivity and specificity of the Abbott RealTime CT/NG assay using self-collected and clinician-collected specimens, patients preferred self-swab over clinician-collected swabs, with self-collected swabs and clinician-collected swabs yielding comparable rates of sensitivity and specificity. No adverse events, including injury, were reported as a result of self-collection.²²

3. *Protection against risk(s):*

Please see Section III, #3 above regarding protection of patient's medical information. In addition, if the patient is a minor and their package containing testing materials is opened by a parent, this may result in a breach of privacy for the patient. To minimize this risk, the packaging containing both medication abortion medications and testing materials is a discreet, USPS Priority Mail package. The patient is provided with tracking information so they know when to expect this package and can anticipate its arrival accordingly. Alternatively, if the patient is worried that their parents will open their mail, they can elect to have the package sent to a different address.

In previous studies performed assessing at-home, self-swab collection for STI testing, there was no mention of injury among adverse outcomes. Additionally, in a survey delivered through a multi-site clinical trial for self-collected STI testing, the majority (96.2%) of participants found self-swabbing to be "very easy" (89.6%) or "somewhat easy" (6.6%), while only 0.5% of participants found self-swabbing to be "somewhat or very difficult".¹² If a participant is injured in an attempt to self-swab, they may be seen in our 1004 to assess and/or repair the injury. If the patient is located on a neighbor island, they may seek care with their OB/GYN or at an urgent care facility. This visit will be billed through their insurance provider.

4. *Potential benefit(s) to the subject (direct medical benefit(s)):*

The direct benefit to the subject includes increased access to STI testing and treatment services.

5. *Alternative to participation:*

Declining participation will not affect patients' medical care, as patients will still be provided abortion care through telemedicine, which was the intended purpose of their visit. Additionally, if patients would prefer to get in-person STI testing, they will be provided with locations near them that offer STI testing.

Section V: Subject Identification, and Consent/Assent

1. *Method of subject identification and recruitment:*

Patients of the 1004 clinic who utilize the telemedicine service for medication abortion consultation. Patients will not be pre-screened before their visit for eligibility; eligibility will be assessed by the physician during the telemedicine abortion visit.

2. Process of consent:

Any patient who fulfills the inclusion criteria at the time of their visit will be asked if they are interested in participating in the study. If they are interested, at the completion of their medication abortion consultation, they will be immediately directed to a new telehealth visit with a member of the research team. At this visit, the study will be reviewed with the patient and informed consent will be collected if the patient wishes to participate. A standard, IRB-approved consent form will be used. The consent form will be sent to the patient for review via Adobe e-sign during this research visit. Once the patient has received the consent form, it will be reviewed by the research associate with the patient verbally, explaining the nature and purpose of the study, intervention and tasks associated with participating, as well as all risks and benefits associated with participation. Research associates can answer questions about the study and complete informed consent. If questions are outside of research associates' scope, then physicians will be available to answer these questions. Patients will be able to complete their consent via the Adobe e-sign platform. If enrolled, patients will be provided a signed copy of the consent form sent to their email.

3. Subject capacity assessment procedures:

Not applicable.

4. Subject/Representative comprehension:

Patient must be able to understand and communicate effectively in English. As part of obtaining informed consent, patients must be able to demonstrate comprehension of the risks and benefits of study to the researcher. If they are unable to do so using basic English, they will not be deemed appropriate for participation in this study.

5. Debriefing procedures for non-disclosed information (if applicable):

Not applicable.

6. Documentation of consent/assent:

An IRB-approved consent form will be used to document consent. Subjects will be provided with a copy of the signed consent form. A copy of the signed consent form will be scanned into the subject's medical record and a physical copy will be stored with their study materials in the PI's secure office.

7. Costs to the subject

No monetary cost will be incurred by the subject as a result of participation in this study, as all testing costs will be covered completely by the research study. As chlamydia is the most common STI in Hawai'i,²³ this is the test we anticipate will most likely resulting as positive. If a patient tests positive for chlamydia, the research team will cover the costs of antibiotic (doxycycline) treatment, which will be mailed to the patient. If a patient tests positive for gonorrhea or trichomonas and requires treatment, the treatment will be ordered for the patient and will be the responsibility of the patient or her insurance.

8. Payment for participation:

Participants will be compensated a total of \$25. They will receive a Long's gift card in the mail with the medication abortion and swab collection kits.

9. Study costs:

The study costs will be covered by Thu, who have provided an \$9,375 grant to cover costs for participant remuneration, the distribution, shipping, and processing of STI self-collection kits, and treatment for participants who test positive for Chlamydia infection.

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APPENDICES

Appendix A: CDC guidelines for STI testing for female patients¹¹

Women	
Chlamydia	<ul style="list-style-type: none"> • Sexually active women under 25 years of age • Sexually active women 25 years of age and older if at increased risk • Retest approximately 3 months after treatment • Rectal chlamydial testing can be considered in females based on reported sexual behaviors and exposure, through shared clinical decision between the patient and the provider

Gonorrhea	<ul style="list-style-type: none"> • Sexually active women under 25 years of age • Sexually active women 25 years of age and older if at increased risk • Retest 3 months after treatment² • Pharyngeal and rectal gonorrhea screening can be considered in females based on reported sexual behaviors and exposure, through shared clinical decision between the patient and the provider
Syphilis	<ul style="list-style-type: none"> • Screen asymptomatic adults at increased risk (history of incarceration or transactional sex work, geography, race/ethnicity) for syphilis infection
Herpes†	<ul style="list-style-type: none"> • Type-specific HSV serologic testing can be considered for women presenting for an STI evaluation (especially for women with multiple sex partners)
Trichomonas	<ul style="list-style-type: none"> • Consider screening for women receiving care in high-prevalence settings (e.g., STI clinics and correctional facilities) and for asymptomatic women at increased risk for infection (e.g., women with multiple sex partners, transactional sex, drug misuse, or a history of STI or incarceration)
HIV	<ul style="list-style-type: none"> • All women aged 13-64 years (opt-out) • All women who seek evaluation and treatment for STIs
HPV, Cervical Cancer	<ul style="list-style-type: none"> • Women 21-29 years of age every 3 years with cytology • Women 30-65 years of age every 3 years with cytology, or every 5 years with a combination of cytology and HPV testing
Hepatitis B Screening	<ul style="list-style-type: none"> • Women at increased risk (having had more than one sex partner in the previous 6 months, evaluation or treatment for an STI, past or current injection-drug use, and an HBsAg-positive sex partner)
Hepatitis C Screening	<ul style="list-style-type: none"> • All adults over age 18 years should be screened for hepatitis C except in settings where the hepatitis C infection (HCV) positivity is < 0.1%

Appendix B: Contents of specimen collection kit

1. Abbott Multi-Collect Specimen kit: this kit is comprised of a sterile collection swab and a collection tube with buffer solution.
2. Tape to secure the collection tube
3. Instructions for collection (Appendix C)
4. Watertight, sealable biohazard bag to place specimen in after collection
5. Small absorbent pad, to be wrapped around the specimen collection tube and secured with a rubber band
6. Padded envelope to protect collected samples
7. FedEx Clinical Pack to place padded envelope with enclosed sample in
8. Prepaid shipping label to Emory Clinical Labs

9. Shipment log requisition form (Appendix D), to be sent with sample

Appendix C: Written Instructions for self-swab collection²⁴

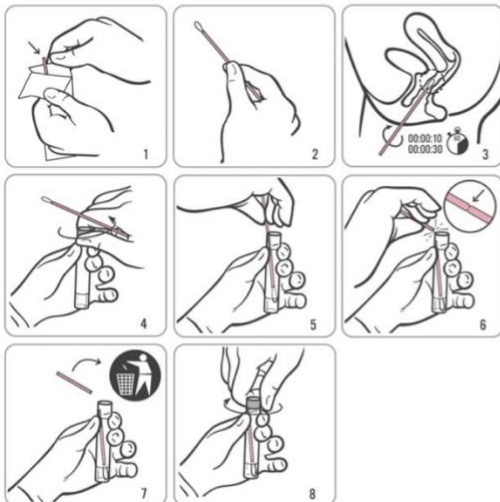
NOTE: Please wear gloves whenever handling specimen collection kit materials, particularly the buffer solution. Wash your hands prior to putting gloves on.

NOTE: In order to avoid injury to your genital tract, avoid inserting the swab higher than instructed. Swab collection should not be painful. If it is, stop collection and contact your doctor.

Self-Collected Vaginal Swabs for Gonorrhea and Chlamydia

Women who do not need a pelvic exam as part of their clinic evaluation may be screened for chlamydia and gonorrhea by providing a self-collected vaginal swab.

Your healthcare provider should give you instructions and make sure you understand what to do before you start. This page explains the procedure.



(Illustrations courtesy of Gen-Probe Incorporated, San Diego CA)

To collect a vaginal swab for gonorrhea/chlamydia testing:

1. Thoroughly wash your hands before starting. Undress from the waist down.
2. Read the instructions for using the test kit.
3. Open the kit package and set the tube of liquid to the side (do not open tube).
4. Partially peel open the swab package as directed, exposing the stick end of the swab (see picture 1).

IMPORTANT: Do not touch the soft tip of the swab or lay the swab down. If the soft tip is touched, the swab is laid down, or the swab is dropped, ask for a new test kit.

5. Remove the swab from the package carefully; do not lay it down.
6. Hold the swab in the middle of the stick (shaft) with your thumb and forefinger (see picture 2).
7. Carefully insert the soft tip end of the swab into your vagina about 2 inches (5 cm) past the opening of the vagina (see picture 3). Gently rotate the swab for 10 to 30 seconds, making sure the swab touches the walls of the vagina so that moisture is absorbed by the swab.
8. Withdraw the swab without touching your skin.
9. While still holding the swab, carefully unscrew the cap from the tube of liquid. Do not spill the contents of the tube. (See picture 4.)
10. Immediately place the swab into the tube so that the soft tip of the swab is visible below the tube label. (See picture 5.)
11. Carefully break the swab shaft at the scoreline (dented line around middle of stick), being careful not to spill the liquid in the tube (picture 6). Leave the soft end of the swab in the tube and throw away the top portion of the swab shaft (picture 7). Tightly screw the cap onto the tube (picture 8).
12. If the contents of the tube are spilled or the tip of the swab touches anything, ask for a new test kit.
13. Return the tube as instructed by the nurse or doctor.

Appendix D: Patient specimen collection log (to be sent with completed sample)

Specimen Collection / Shipment Log					
Study Name:	STAMP				Send box to:
					Clinical Virology Research Laboratory
Contact Person:	Olivia Manayan				Emory University WMB rm7007
Institution	Queen's Medical Center				101 Woodruff Circle
Phone number	808-686-4690				Atlanta GA 30322
email:	FPRCH@Queens.org				(P) 404-727-4483
PI	Olivia Manayan				(F) 404-727-4382
Ship Date:					Please include this log with each batch of specimens.
Participant ID	Collection date	Vaginal Swab in Multicollect tube	Blood Collection	Rectal Swab in Multicollect tube	TESTS REQUESTED:
			n/a	n/a	CT/NG/TV

Appendix E: Intervention survey, link to be texted to patients

Part I: Demographics (to be completed at the time of enrollment)

1. Please enter your study ID number:
2. Which island do you live on?
 - a. Hawai'i (Big Island)
 - b. Kaua'i
 - c. Lana'i
 - d. Maui
 - e. Moloka'i
 - f. O'ahu
3. What is your ethnicity (please check all that apply):
 - a. American Indian/Alaska Native/Eskimo/Inuit
 - b. Asian Indian
 - c. Black
 - d. Caucasian/White
 - e. Chinese
 - f. Fijian
 - g. Filipino
 - h. Guamanian/Chamorro
 - i. Japanese

- j. Korean
- k. Mexican
- l. Micronesian
- m. Native Hawaiian
- n. Puerto Rican
- o. Samoan
- p. Vietnamese
- q. Other Asian
- r. Other Pacific Islander
- s. Other Hispanic/Latinx
- t. Other (write in)

Part II: Digital Health Acceptability Questionnaire – to be completed post-collection
Post-collection survey

Thank you for submitting your specimen! We appreciate your time and effort. Please take some time to fill out the following survey to the best of your ability. The entire survey should take approximately five to ten minutes.

Thinking about all of the telehealth [phone/video] appointments that you have had related to this study, please choose the response [Strongly disagree through to Strongly agree] below that best fits your opinion.

STI testing through telehealth fits with my idea of what good healthcare should be.

1.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

Having video appointments for STI testing is in line with my healthcare goals.

2.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

It took very little effort to have STI testing appointments via video.

3.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

4. Having healthcare appointments via video for STI testing was not a burden.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5

I believe video appointments for STI testing meet my healthcare needs.

5.	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
	1	2	3	4	5

Having video appointments for STI testing saved me time.

6.	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
	1	2	3	4	5

Telehealth video STI testing was easy for me to use.

7.	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
	1	2	3	4	5

I have no doubt in my ability to set up and have my healthcare appointments via video.

8.	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
	1	2	3	4	5

I really enjoy having my healthcare appointments for STI testing via video.

9.	Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
	1	2	3	4	5

10. I liked having my healthcare appointments for STI testing via video.

Strongly Disagree	Disagree	Neutral	Agree	Strongly Agree
1	2	3	4	5