Sample Toolkit for Express STI Services

This Toolkit for Express Sexually Transmitted Infection (STI) Services is intended to assist Federal, Tribal, and Urban (I/T/U) clinics establish Express (or fast-track) STI testing and treatment. The purpose is to support clinics that are considering, implementing, or scaling up STI express services by summarizing evidence, key considerations, and resources. This toolkit is intended for Providers, RNs, Pharmacists, and Laboratorians. These policy, practice, and educational materials are a resource to guide the diagnosis and treatment of patients and non-beneficiaries to reduce morbidity and mortality in the communities served by I/T/U facilities. Facility leadership and providers should always assess patients based on their clinical circumstances and local burden. For any questions, please contact Rick Haverkate at Richard.Haverkate@ihs.gov.

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Overview

Incident sexually transmitted infections (STIs) — gonorrhea, chlamydia, syphilis, and HIV — have rapidly increased in Indian Country. Of special concern is syphilis, which is disproportionately affecting American Indian and Alaska Native people relative to other racial/ethnic populations in the United States. Syphilis can be clinically challenging to diagnose and treat as compared to other STIs, and its short and long-term sequelae can be life-threatening for both adults and infants.

Clinics urgently need to increase STI testing and treatment while minimizing the impact on staff and systems. Clinics have responded in a variety of innovative ways, including implementing express STI services. The use of express visits increases overall screening capacity for STIs. If a clinic routinely turns away a high number of patients every day, patients are required to wait long periods for testing or patients need to be scheduled into clinical services many days later, express STI testing can reduce patient wait times for STI testing and allow for more patients to be evaluated in the clinic.

Express STI services refer to triage-based STI testing without the need for a full clinical exam. Research shows that express STI services increase clinic capacity and reduce time to treatment. Because express services are driven by limited interactions with clinicians, they are also associated with staffing models that maximize top of license strategies, patient self-collection of specimens, and technology to conserve time and staffing.

1. An Express STI Service requires:
2. Assignment of both clinical and non-clinical staff for intake, triage, and testing processes
3. Availability of a standing order for STI testing
4. Review of STI lab results by the supervising or ordering clinician
5. Notification to the patient of STI lab results
6. Linkage to treatment for patients with positive STI tests
7. Treatment for patients with STIs, including by a standing order for STI treatment

This toolkit contains key observations from NACCHO and CDC in a highly summarized format. It is not comprehensive. Supplemental materials provide concrete examples of policies and workflows that should be adapted to the context of the facility.

Providers should directly reference the CDC STD guidelines for up to date recommended management of patients diagnosed with STIs: CDC - STD Treatment (https://www.cdc.gov/std/treatment/default.htm)

Training, support, and material resources can be made available for Express STI services and other STI and related needs. Contact Richard.Haverkate@ihs.gov or Andrew.Yu@ihs.gov.

Intake and Triage

Typical express STI service-eligible patients include those who state that they are *asymptomatic*.
The assessment should include actively asking about symptoms or a known STI exposure, which would indicate triage to a regular medical visit rather than an Express STI test visit. Some clinics focus on the express element and develop risk assessments that take no more than five minutes to complete. An example of a risk assessment is in Appendix A.

The initial assessment and triage of patients seeking express STI services can occur in several ways, including paper forms, clinical triage, or a combination. Patients don't always report symptoms on digital or paper risk assessments. A best practice is to conduct a brief in-person symptom screening prior to testing to confirm the patient is triaged appropriately. Obtaining a sexual history and assessing risk for STIs include the five P's: partners, practices, protection, past STIs, and current pregnancy, and prevention of pregnancy. Clinics may prefer that certain populations of patients (such as transgender and HIV-positive patients) always see a clinician to collect more accurate and comprehensive patient histories and respond to unmet primary care needs. Sample policies and standing orders for express STI services are in Appendices B, C, D.

Staffing and Patient Flow

Staffing models and the physical layout of the facility largely dictate how express STI testing is implemented. A common goal of implementing express visits is to maximize "top-of-license" strategies. Since express services are, by definition, visits that do not include clinical examinations, they tend to use RNs, LPNs, and MAs. Non-licensed staff may also be part of patient navigation. See appendices E, F and G for examples of registration desk, nurse, and lab point of contact Express STI Services.

Staff levels of comfort in delegating tasks may vary depending on many factors such as level of training and existing workloads. Providers and administrators must be comfortable with standing orders. Staff may require training to be comfortable administering new services. If delegated staff are expected to assume duties additional to their typical workload, clinic managers may need to consider how to best pilot test services to find the best solution. Cross training staff and departments so that services are still available when one department is understaffed can ensure services are maintained (nursing can learn how to draw labs and collect specimens if lab is overwhelmed).

Offering express services has been shown to increase the number of patients a clinic is able to see per day. Patient volume and staffing will determine a clinic's capacity and turn away rate. Some clinics may choose to limit their express option to specific days/times.

When determining a schedule for express services, clinics should consider the days and times that visits are most utilized by the populations they serve, as well as the average length of an express vs non-express visit. Volume and capacity may change based on staffing, regular variations in testing practices, partner services, and treatment for those who test positive.

Testing

The typical package of testing for express STI services include gonorrhea, chlamydia, syphilis, and HIV. Pregnancy testing should also be added as part of the testing package. Pregnant people with SUD may avoid prenatal care if there is a perception it will lead to punitive measures. Staff should be prepared to have conversations on SUD in a non-judgmental way. See Plan of Safe Care Toolkit for more information: https://www.indiancountryecho.org/plans-of-safe-care-toolkit/. An example of a laboratory testing list and standing order is included in Tables 1 and 2 of appendix C and specimen collection is in appendix H.

Point-of-care testing

POC testing provides opportunities for rapid detection and treatment and enables staff to contact partners immediately to bring them in for screening and treatment. True POC tests exist for HIV, HCV and syphilis, while gonorrhea and chlamydia have near POC tests.

Self-Collection of STI specimens

Self-collection of specimens has benefits for patients and providers. There is strong evidence that patients are able to accurately collect samples by themselves, given proper instructions. Evidence also shows high patient satisfaction, with patients finding self-collection easy and comfortable. Because express patients don't see providers, most clinics implement self-collection protocols for swabs and urine for gonorrhea and chlamydia and have another provider collect serum for HIV and syphilis. Considerations include:

- Physical space: Clinics should have an adequate number of single-occupancy bathrooms and clear patient instructions for collection and what to do with the samples.
- Instructions: It is important for clinics to include body-specific, rather than gender-specific, language. Instructions for what to do with samples will be specific to each clinic.
- Posters examples of patient instructions and methods for specimen self-collection of STI specimens are included in Appendix J, K and L.

Consideration of priority populations

1. Pregnant patients: Express STI testing should not be a substitute for prenatal care. Pregnant patients should have scheduled follow up visits with a prenatal care provider. Pregnant people with a substance use disorder (SUD) may avoid prenatal care if there is a perception it will lead to punitive measures.
2. Substance use disorder: People (including pregnant patients) with SUD may avoid express STI screening if there is a perception it will include drug testing or lead to punitive measures. Staff should be clear on what tests are included in the testing package and that urine drug screening is not included. Staff should be prepared to have conversations on SUD in a non-judgmental way. See Plan of Safe Care Toolkit link for more information: https://www.indiancountryecho.org/plans-of-safe-care-toolkit/
3. Patients experiencing domestic violence. These patients are at risk for having physical injury and will need additional support services. If domestic violence is disclosed by the patient at triage, the patient should be considered for a provider visit.
4. Sexual Assault: Express STI testing should not be considered for patients that have been sexually assaulted.
5. Adolescents: In most states, minors are able to seek STI testing without parental consent. This should be considered alongside agency and facility-based guidance. https://www.guttmacher.org/state-policy/explore/minors-access-sti-services

Laboratory

The *Recommendations for the Laboratory Based Detection of Chlamydia trachomatis and Neisseria gonorrhoeae, 2014* details testing modalities and performance of provider and self-collected testing. For extragenital testing, no platform is approved for self-collected swabs, whether collected in the clinic or elsewhere, though extragenital testing platforms were cleared by the FDA in 2019 for clinician-collected testing. The only tests that are FDA cleared for self-collection in a clinic setting are urine and vaginal samples as listed in the Laboratory guidelines. CLIA-regulated laboratory validation requirements for self-collection of genital and extragenital testing need to be reviewed and addressed by the clinic's partner laboratory if the testing being undertaken is not FDA-cleared for this purpose.

Unless test specimens are processed in the clinic, billing for extragenital gonorrhea and chlamydia tests is usually performed by the laboratory performing the NAATs. Laboratories will use the current procedural terminology (CPT) codes for gonorrhea and chlamydia tests: 87491 (chlamydia) and 87591 (gonorrhea). NAATs performed on the same date but from different anatomic locations will need separate orders for each extragenital location, or sample. The modifier "90" indicates that the test is outside of the organization (reference laboratory) as "87491-90" for example.

Treatment of Positive STI Results

Empiric and directed treatment for bacterial STIs is a core component of Express STI Services. These treatment services may occur through same-day care linkage to a healthcare professional for a medical visit or via a nurse- or pharmacy-drive standing order protocol, whereby the nurse or pharmacist provides appropriate empiric or targeted treatment of gonorrhea, chlamydia, or syphilis and the patient is subsequently linked to care for a medical visit in subsequent days or weeks. Order sets with up-to-date CDC standards for STI treatment can be beneficial to expeditious treatment by healthcare professionals or via a standing order protocol. Sample standing orders are in Appendices B and C). Additional treatment-related protocols for chlamdyia, gonorrhea, syphilis, and penicillin anaphylaxis are in appendices L, M, N, O.

Penicillin allergy evaluations are important for optimal patient care and public health. Practical outpatient strategies to confirm or rule out penicillin allergy are needed to assess as many patients as possible, as safely as possible. In one study, an outpatient amoxicillin protocol resulted in the removal of allergy labels in 95% of patients (N=509). These results can be found in Risk-Based Pathway for Outpatient Penicillin Allergy Evaluations.
https://www.ncbi.nlm.nih.gov/pmc/articles/PMC6733651/

Post Exposure Prophylaxis

Chemoprophylaxis after suspected or known HIV exposures, also known as HIV Post-Exposure Prophylaxis or PEP, is another important component of Express STI services. This preventive treatment service may be offered via expeditious care linkage to a healthcare professional for a medical visit within 72 hours of the incident exposure. Order sets with up-to-date CDC standards for HIV PEP can be beneficial to expeditious treatment by healthcare professionals.

As of May 2023, data are emerging on the preventive value of post exposure prophylaxis (PEP) for STI exposure. Subsequent versions of this toolkit will update this area for upcoming recommendations on STI PEP.

Notification of Results and Referral for Treatment

Prompt notification and treatment are essential for treating patients and reducing ongoing STI transmission. Best practice is to offer multiple avenues for prompt results notification (e.g., a results phone line and an online portal) so patients can access results in a way that best meets their preferences and allows for timely referral for treatment. Appendix H, includes an example of patient instructions for obtaining results from a web-based portal.

Confidential Public Health Partner Services

In collaboration with tribal, county and state health departments, sexual partners can be confidentially notified of their exposure to STIs (syphilis, gonorrhea, chlamydia, and HIV) following an interview of the STI case patient by a social hygiene technician (SHT), a disease intervention specialist (DIS) or a communicable disease investigator (CDI). Confidential partner services is an important part of public health intervention for identifying undiagnosed STI cases, prevention of ongoing community transmission and prevention of re-infection of the original case patient following initial treatment.

Communication with the health department through public health case reporting can initiate this process or the process can be expedited by direction communication with the health department. It is important to develop and maintain close collaboration and information sharing with the health department (s) performing this public health function. Information on Partner Services for both STIs and HIV can be found at STD Program Partner Services | STDs | CDC AND Partner Services | Diagnose | Effective Interventions | HIV/AIDS | CDC.

In addition to phone calls and letters, several studies have been conducted to evaluate internet partner services (IPS) outcomes, which may be necessary in settings where DIS support and PHN shortages may result in notable delays in notification, treatment, and contact tracing.

IPS can be used in ways that are fully HIPAA compliant. Studies on IPS include use of email, social networks, and text messaging. These interventions have been documented to link patients to care that would have otherwise not been located, did not require additional staff time, and allowed for rapid partner notification communication. Another study found that the use of social networks augmented traditional efforts by allowing DIS to reach partners more quickly, especially among those individuals who may frequently change phone numbers or addresses, while also aiding in the identification of sought-after partners.

A structured literature review of published studies about technology for STI/HIV partner services found that the use of technology resulted in additional partners notified, screened, or tested; the identification of new positive cases; and contact with partners who otherwise would not have been notified of their STI/HIV exposure. Furthermore, the integration of technology provided other programmatic advantages such as improved operational efficiencies, reaching partners, and cost savings.

The CDC's IPS Toolkit contains templates on procedures, texts and emails that can be used to reach out to STI contacts without violating HIPAA.

Expedited Partner Therapy (EPT)

Expedited Partner Therapy (EPT) is the clinical practice of treating partners of heterosexual patients with a known or suspected diagnosis of GC/CT/MPC/NGU without performing an exam on the partner. Treatment can be achieved by 1) providing medication in the clinic without an exam, 2) issuing the medication or a prescription to the patient to give to the partner, 3) delivery of medication to the partner in the field by clinic staff. Treatment of non-beneficiaries with EPT is allowable and encouraged and can be found in the Indian Health Manual. Part 2. Chapter 4. Appendix E: Statutes That Allow Health Services to Be Provided to Ineligible Individuals at IHS Facilities. Sec.813(c) IHCIA.

Expedited STI Management

- Patient-Delivered Partner Therapy (PDPT). The most common type of EPT; the patient delivers the medication or a prescription to his/her sex partner(s) without the sexual partner undergoing testing or a provider exam.
- FDT – Field-Delivered Therapy. Treatment of patients with a positive test result and/or partners (with or without testing) in the field by an appropriately trained clinic staff (i.e. MD, PA, NP, PHN, RN, LVN, pharmacist or Outreach worker).

For any further questions or information, please contact Rick Haverkate at richard.haverkate@ihs.gov.

Appendix A Express STI Risk Assessment

Express STI Testing Questionnaire

Please answer the following questions

SYMPTOMS	
Do you have discharge/abnormal bleeding or blood spotting from penis, vagina, or bottom?	Yes ☐ No ☐
Do you have a rash on penis, vagina, bottom, or body?	Yes ☐ No ☐
Do you have pain/discomfort when passing urine (peeing)?	Yes ☐ No ☐
Do you have pain/discomfort in lower tummy, bottom, or genital area?	Yes ☐ No ☐
RISKS	
Has a sexual contact told you they have symptoms?	Yes ☐ No ☐
Has a sexual contact told you they've been treated for an STI (sexually transmitted infection)?	Yes ☐ No ☐
Have you had a new sexual contact within the last year?	Yes ☐ No ☐
Do you have sexual contact with: Men ☐ Women ☐Both Men and Women ☐ People of Another Gender ☐	
Number of different people you've had sexual contact with in the last: 3 months: 12 months:	
Do you use condoms with casual contacts? Always ☐ Sometimes ☐ Never ☐	
Have you ever received anal sex?	Yes ☐ No ☐
Have you ever used needles to inject drugs (including steroids) into yourself?	Yes ☐ No ☐
Have you ever had a sexual encounter against your wishes or sexual abuse?	Yes ☐ No ☐
Have you ever experienced domestic violence (psychological/sexual/physical)?	Yes ☐ No ☐
Do you smoke?	Yes ☐ No ☐
If you smoke, do you want to stop?	Yes ☐ No ☐

Tests are sent to the laboratory using your name and chart number. If you do not want other health providers to see your results and prefer a coded number, then please inform the nurse.

Confidentiality:
We are here to listen, not tell others.
The only reason we might have to consider contacting another service or professional without your permission would be to protect you or someone else from serious harm-and we would always try to discuss this with you first. If you have any worries about confidentiality, please feel free to ask a member of staff.

Why do we ask these questions?
This helps us assess your risk factors and ensure we are testing you in the right way from the right place and in the right timeframes.

Thank you.

Appendix B. Policy and Protocol for STI Testing/Treatment

SAMPLE POLICY AND PROTOCOL
EXPRESS STI CLINIC SERVICES POLICY:

It is the policy of _____ clinic to provide the appropriate level of care to each client depending on their symptoms, risk factors, and personal concerns.

PURPOSE: To provide a procedure for triaging appropriate clients into "express" lab testing and/or treatment.

PROTOCOL: After the client completes a history, the receptionist will review the form. If the history is negative for risk factors and the client denies symptoms, the client will be offered the option of "express" services. However, the client maintains the option to request comprehensive services.
Nurses and trained and approved personnel may conduct "express" testing. Only nurses or other clinicians may do comprehensive exams.

If the assessment form reveals one or more high-risk criteria and the client has no symptoms, the express assessment nurse or other trained and approved staff may collect a urine, throat, vaginal, and/or rectal specimen from the client for gonorrhea and chlamydia testing and have the client's blood drawn for HIV and syphilis. (Depending on local syphilis rates, the patient may be offered prophylactic treatment for syphilis.)
"Express" services also include immunizations, repeat Bicillin injections, pregnancy tests, treatment of partners who accompany patients, asymptomatic contacts seeking treatment, etc.

If the Assessment form reveals one or more high-risk criteria and the client has symptoms, the client will receive a comprehensive STI evaluation and appropriate lab testing and treatment.

High risk clients who require an exam regardless of symptoms are persons who are contacts to syphilis, MSM, injecting drug users, and persons who exchange money and/or drugs for sex, or people who may be pregnant.
The lab will perform a stat RPR or rapid point of care syphilis test and a rapid HIV test if available. The client is instructed to remain in the clinic until test results are available.

CLIENT EDUCATION: Results may be given by clinicians, nurses or other trained clinic staff. The client is instructed to call the clinic in 7-10 days for GC/CT and traditional, confirmatory HIV results. Condoms and lube are offered to all clients. Although counseling is abbreviated, it should include:

1. how to take the medication,
2. symptoms of more serious infection (e.g., pelvic pain in women, testicular pain in men, or fever in men or women),
3. seeking prenatal care as soon as possible if pregnancy is confirmed or possible,
4. abstain from sex for at least seven days after completing treatment,
5. ensure all partners have been treated,
6. seek clinical services for re-testing three months after treatment.
   Note: Pharyngeal GC treatment requires test of cure 1-2 weeks post-treatment.

Appendix C Standing Order for STI Testing and Treatment

STANDING ORDER: SEXUALLY TRANSMITTED INFECTION TESTING AND TREATMENT BY NURSING AND PHARMACY

PURPOSE: To permit nurses and pharmacists to screen for bacterial sexually transmitted infections (STIs), HIV, and hepatitis C virus (HCV) and to treat bacterial STIs among American Indian/Alaska Native (AI/AN) populations accessing medical services within Indian Health Service (IHS) clinical facilities or field sites serviced by IHS staff. Bacterial STIs relevant to this pathway are gonorrhea (GC), chlamydia (CT), syphilis, and trichomoniasis.

RATIONALE: Due to high incidence and prevalence of treatable STIs within Indian Country – infections that propagate significant morbidity and mortality when undiagnosed and untreated – expanded access to STI testing and treatment are needed for AI/AN adolescents and adults.

POLICY STATEMENT:

This policy and standing order permits nurses (outpatient or Public Health Nurse/PHN) and/or pharmacists to provide:

1. Screening testing for chlamydia, gonorrhea, syphilis, HIV, and HCV among adolescents and adults engaging in any type of sex, or upon an individual's request for STI testing regardless of sexual history.
2. Treatment for suspected or confirmed bacterial STIs (including GC, CT, early to early latent syphilis, and trichomoniasis) among adolescents and adults per the current Centers for Disease Control and Prevention (CDC) Guidelines.
3. Resources on sexual health, HIV pre-exposure prophylaxis (PrEP), and HIV post-exposure prophylaxis (PEP) for adolescents and adults.[i]
4. Screening of adolescents and adults for intimate partner violence (IPV), sexual exploitation, and substance use/misuse during sex.

[i] This policy does not account for initiation or management of pre- or post-exposure prophylaxis for HIV infection.

ASSESSMENT:

1. Eligibility and criteria to determine the situation or condition for which the standing order may be carried out.
    a. Screening testing pathway:
        i. Patient is asymptomatic, aged ³14 years,[2] eligible for clinical services within the IHS.[3] and:
            1. Requests STI screening due to engagement in sex without use of barrier methods to prevent STI exposures.
            (OR)
            2. Reports sexual contact with an individual with known STI(s).
            (OR)
            3. Requests STI screening (regardless of disclosed sexual history).
            (OR)
            4. Is eligible for routine STI screening based on age, risk factors per sexual history[4], and/or other medical indications[5].
        ii. Patient is located in the outpatient clinic, the pharmacy, or a field site.
    b. Treatment pathway:
        i. Aged ³14 years and their reported sexual contact(s) aged ³14 years,[6] eligible for clinical services within the IHS[iii] and:
            1. Patient has positive screening or diagnostic laboratory testing for STI(s).
            (OR)
            2. Patient is identified in a public health report as a sexual contact to individual(s) with known STI(s).
            (OR)
            3. Patient is symptomatic, but does not have a positive screening or diagnostic laboratory testing for STI(s) or is identified in a public health report as a sexual contact to individual(s) with known STI(s).
            (OR)
            4. Patient is asymptomatic, reports risk factors per sexual history, and experiences barriers to future care linkage for STI treatment.
        ii. Patient is located in the outpatient clinic, the pharmacy, or a field site.

PROCEDURES BY PATHWAY:

1. Screening testing pathway for asymptomatic adolescents and adults:
    a. Patient requests STI screening from nurse or pharmacist.
    (OR)
    Patient is offered STI screening by nurse or pharmacist.

[2] This age limit varies by state or by facility-based policies about minor consent for sexual health services.

[3] IHS bylaws permit the treatment of sexual contacts of patients with known communicable diseases, even if these sexual contacts are not otherwise be eligible for services at an IHS facility (WEBSITE link).

[4] New sex partner in past 60 days; multiple sex partners or sex partners with multiple concurrent sex partners; anonymous sex partners; engagement in exchange sex for money, drugs, food, shelter, etc; sexual contact with sex workers.

[5] Examples of medical indications for routine STI testing are known HIV infection or use of HIV PrEP.

[6] This age limit varies by state or by facility-based policies about minor consent for sexual health services.

b. Patient is queried for signs and symptoms of bacterial STIs, HIV, and HCV, and knowledge of sexual contacts with known/suspected STIs.[7,8,9]
c. If signs, symptoms, and exposures are absent, patient is offered comprehensive screening tests for bacterial STIs, HIV, and HCV.
    i. Patient also receives urine pregnancy testing if has uterus and ovaries and is premenopausal.
    ii. Refer to Table 1 for laboratory orders.
    iii. Refer to Supplement # for procedural logistics involving collection of bodily fluid specimens.
d. Patient receives counseling on HIV PrEP/PEP.
e. Patient is screened for IPV, sexual exploitation, and substance use/misuse during sex.
f. Identify personnel to communicate positive results to patients and to coordinate care for treatment (the clinician ordering under the protocol or the authorizing provider).

2. Treatment for adolescents and adults with confirmed STI(s) or suspected STI exposure(s)[10]
    a. Patient requests STI treatment from nurse or pharmacist.
    (OR)
    Patient is contacted about STI treatment by nurse or pharmacist.
    b. Patient is queried for signs and symptoms of bacterial STIs, HIV, and HCV, and, if not already asked, knowledge of sexual contacts with known/suspected STIs. [vii]
    c. Patient receives urine pregnancy testing if has uterus and ovaries and is premenopausal.
        i. Identify personnel to communicate result of pregnancy test to the patient and coordinate pre-natal care if result is positive.
    d. If an STI is already confirmed:
        i. Patient is administered the appropriate definitive treatment regimen for the bacterial STI(s) of concern.[11]
            1. Refer to Supplement for procedural logistics involving medication administration.
    e. If exposure to an STI is suspected but not yet confirmed with laboratory testing:
        i. Screening testing is obtained for the bacterial STI(s) of concern and for all other STI(s).
        ii. Patient is administered the appropriate empiric treatment regimen for the bacterial STI(s) of concern.

[7] Signs and symptoms of STIs may include: fevers, chills, sweats; sore throat; oral and/or genital lesions; urethral, vaginal, or rectal discharge; and pelvic pain.
[8] Patient who reports signs/symptoms of an STI requires evaluation by a clinician. Alternatively, the nurse of pharmacist may contact the supervising clinician to determine the appropriate diagnostic testing for any STI(s) of concern.
[9] Patient who reports oral or rectal exposure to gonorrhea or chlamydia requires site-specific STI testing.
[10] The category of suspected STI exposures(s) includes: asymptomatic individuals who report risk factors per sexual history and barriers to future care linkage; and sexual contacts of individuals with confirmed STI(s) (i.e. individuals who qualify for Expedited Partner Therapy, or EPT).
[11] Patient requires linkage to ambulatory care for confirmatory test for cure after treatment for oral GC/CT.

1. Refer to Supplement ? for procedural logistics involving medication administration.

f. A communicable disease investigation is performed and documented in the electronic health record.
    1. Documentation includes signs and symptoms, STI testing results if already completed, pregnancy testing if performed, allergies, treatments administered, counseling provided, sexual contacts identified, and EPT dispensed.
    2. Reports for cases of positive STIs are submitted via the appropriate state reporting system.
g. Patient receives counseling on HIV PrEP/PEP.
h. Patient is screened for IPV, sexual exploitation, and substance use/misuse during sex.
i. If not yet done before time of treatment, patient is linked to ambulatory care for further evaluation and management by a clinician.
    i. Nurse or pharmacist contacts designated provider or other clinician immediately if concerning signs or symptoms of STIs or refers the patient to the emergency department.
j. All sexual contacts are contacted for testing and treatment as outlined in this policy for primary contacts.

APPENDIX

Procedure for laboratory specimen collection

Procedure for medication administration:

i. Administration of benzathine penicillin G
ii. Administration of ceftriaxone
iii. Administration of oral medications
    1. The nurse or pharmacist orders oral medications under EHR standing order and a designated provider as the ordering prescriber. Outpatient pharmacy will be contacted to review for appropriateness and process standing order and will “release without signature.”
    2. The patient is instructed to pick up the medication from the pharmacy or to report to the PHN office.

(OR)

The medication is picked up from the pharmacy by PHN and delivered to the patient in the field.

3. The nurse or pharmacist documents an EHR note as described below.

iv. Administration of any medication is documented in the patient’s medical record by the nurse or pharmacist and must include name of medication, dosage, route, site, and date/time of administration.
v. Nurse or pharmacist contacts designated provider or other clinician immediately if any concerning signs/symptoms of severe local or systemic reaction to administered medication(s) (OR) refers the patient to the emergency department.

1. For directly observed therapy or nurse/pharmacist-administered benzathine penicillin G, documentation of the patient's response to medication administration is required.
2. This Standing Order and plan of care is to be referenced in documentation when applicable.
3. The completed EHR note is routed for co-signature to the designated provider.

TABLE 1. Laboratory Orders to Screen for Sexually Transmitted Infections Among Adolescents and Adults

	Specimen type	**Screening Test**
Chlamydia	Urine (and/or oral swab and/or vaginal swab and/or rectal swab)[12]	Nucleic Acid Amplification Test
Gonorrhea		
Syphilis	Serum	Syphilis algorithm using treponemal test (EIA, TPPA) or nontreponemal test (RPR)
HIV	Serum	Fourth-generation HIV Ag/Ab test (with reflex testing if possible)
HCV	Serum	Hep C Antibody w/reflex to RNA

TABLE 2. Point of Care Orders to Screen for Sexually Transmitted Infections Among Adolescents and Adults

	Specimen Type	**Screening Test**
HIV	Oral fluid or fingerstick (OraQuick) Fingerstick (INSTI) Fingerstick (Alere)	Second-generation HIV Ab (IgG) test Third-generation HIV Ab (IgM/IgG) test Fourth-generation HIV Ag/Ab test
HCV	Fingerstick (OraQuick)	Hep C Antibody
Syphilis	Fingerstick (Health Check)	Treponemal Antibody

TABLE 3. Medications to Treat for Sexually Transmitted Infections Among Adolescents and Adults

Condition	**Medication**
Chlamydia (CT)	**CT** PO Doxycycline 100mg BID for 7 days **CT during Pregnancy** PO Azithromycin 1g in a single dose

[12] Vaginal and urethral swabs may be utilized if urine testing is unavailable.

	<u>Expedited Partner Therapy (EPT)</u> PO Azithromycin 1g in a single dose
Gonorrhea (GC)* *If chlamydial infection has not been excluded, treat for CT.	**<u>GC of the cervix, urethra, pharynx, or rectum</u>** **<u><150kg</u>** – IM Ceftriaxone 500mg in a single dose **<u>>150kg</u>** – IM Ceftriaxone 1g in a single dose **<u>EPT</u>** Cefixime 800 mg in a single dose (if Ceftriaxone 500 mg IM in a single dose cannot be given) **<u>GC/CT coinfection with cephalosporin allergy</u>** IM Gentamicin 240mg in a single dose **PLUS** PO Azithromycin 2g in a single dose
Primary, Secondary, and Early Syphilis	**Primary, Secondary, and Early Latent Syphilis Among Adults** IM Benzathine penicillin G 2.4 million units in a single dose **Nonpregnant Persons with Penicillin Allergy** PO Doxycycline 100mg BID for 14 days OR PO Tetracycline 500mg QID for 14 days **Pregnant Persons** IM Benzathine penicillin G 2.4 million units in a single dose A second dose of IM Benzathin penicillin G 2.4 million units can be administered a week after the first dose.
Late, Unknown Duration Syphilis	**Late, Unknown Duration Syphilis Among Adults** IM Benzathine penicillin G 2.4 million units: 3 doses in 1 week intervals **Nonpregnant Persons with Penicillin Allergy** PO Doxycycline 100mg BID for 28 days OR PO Tetracycline 500mg QID for 28 days **Pregnant Persons** IM Benzathine penicillin G 2.4 million units: 3 doses in 1 week intervals Doses must be given no later than 9 days apart, otherwise full course of therapy should be repeated.

REFERENCES: Centers for Disease Control Sexually Transmitted Infection Treatment Guidelines

Appendix D Express STI Access Policy

[SITE NAME] COMMUNITY HEALTH CARE
POLICIES AND PROCEDURES

SUBJECT: **Sexually Transmitted Infection Access**		
POLICY NUMBER: **4.4.16**	CHAPTER: **4- Quality of Health Care Provided**	
DEPARTMENT: Public Health Nursing		
ORIGINAL DATE: 11/10/2022	REVISION DATE: 12/08/2022	EFFECTIVE DATE: J12/08/2022

PURPOSE: The purpose of this policy is to increase the access and availability of screening for sexually transmitted infections (STIs) with the [SITE NAME] patient population. Thereby decreasing the risks associated with spreading unknown STIs and possible detrimental health outcomes. The CDC indicates that American Indian/Alaska Native populations have a higher percentage increase in STIs than other populations in the United States.

POLICY: Patients may enter any of the [SITE NAME] clinics and request testing for STIs without the need for an appointment with a provider.

RESPONSIBILITIES:

PROCEDURES: Patients will be checked in by {TRIAGE] as a lab visit and directed to the lab [accompanied by staff if appropriate to facilitate visit].

1. Laboratory staff will complete the following testing orders:
    a. Urine gonorrhea and chlamydia
    b. HIV 1 and 2 antibody serology
    c. RPR serology
    d. Hepatitis B serology
    e. Hepatitis C serology
2. A blanket order will be available to all laboratory staff signed by the Public Health Nurse Supervisor
3. The Public Health Nurse Supervisor and/or Communicable Disease Coordinator will be notified of any positive laboratory test results
4. The Public Health Nurse Supervisor and/or Communicable Disease Coordinator will then notify any patient with a positive test result and provide appropriate medical treatment per current CDC guidelines

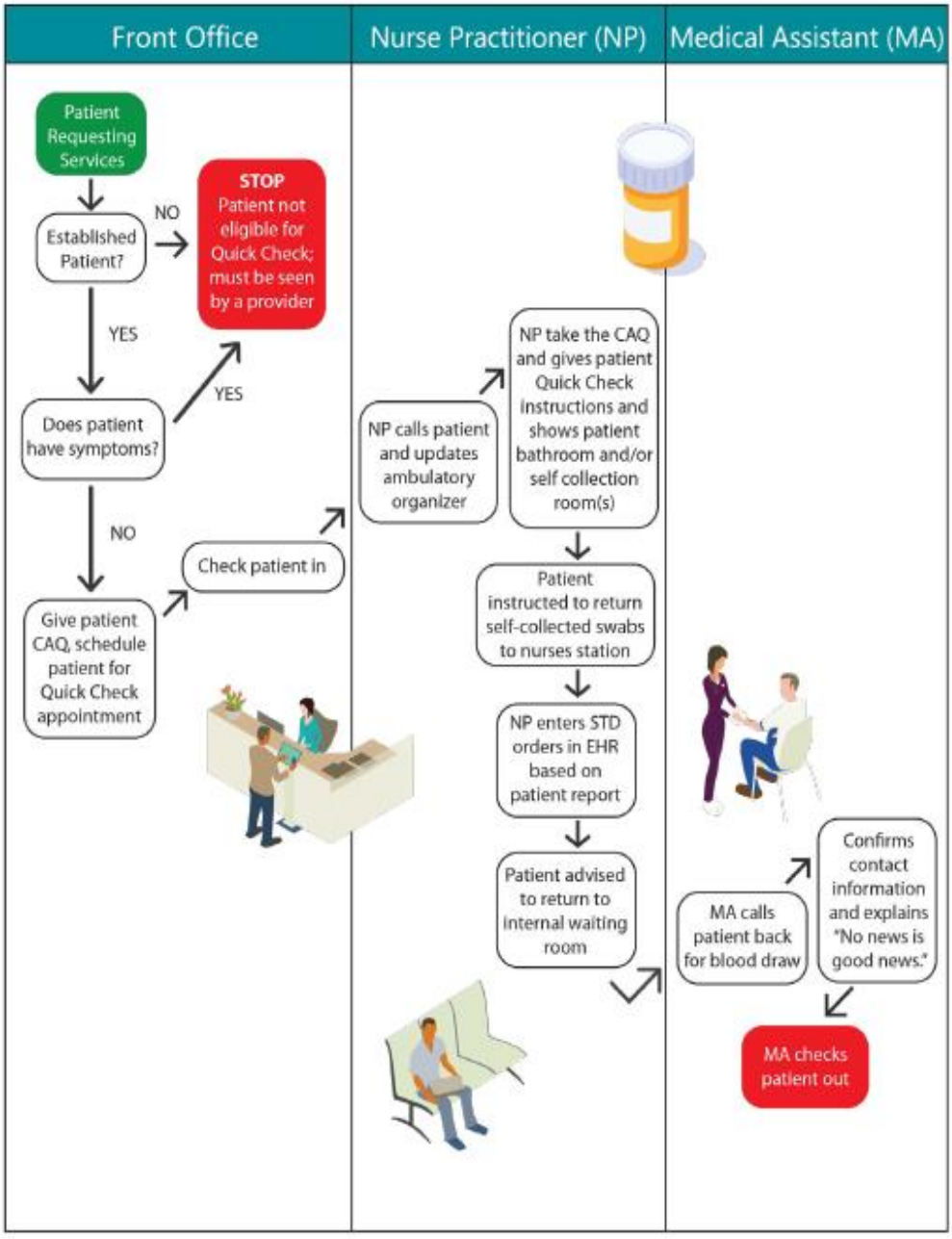
DEFINITIONS:

REFERENCES: Centers for Disease Control and Prevention. Health Disparities in HIV, Viral Hepatitis, STDs, and TB, American Indians/Alaska Natives.
https://www.cdc.gov/nchhstp/healthdisparities/americanindians.html

Appendix E Registration Desk Point of Contact Workflow

Examples of STI Express Models

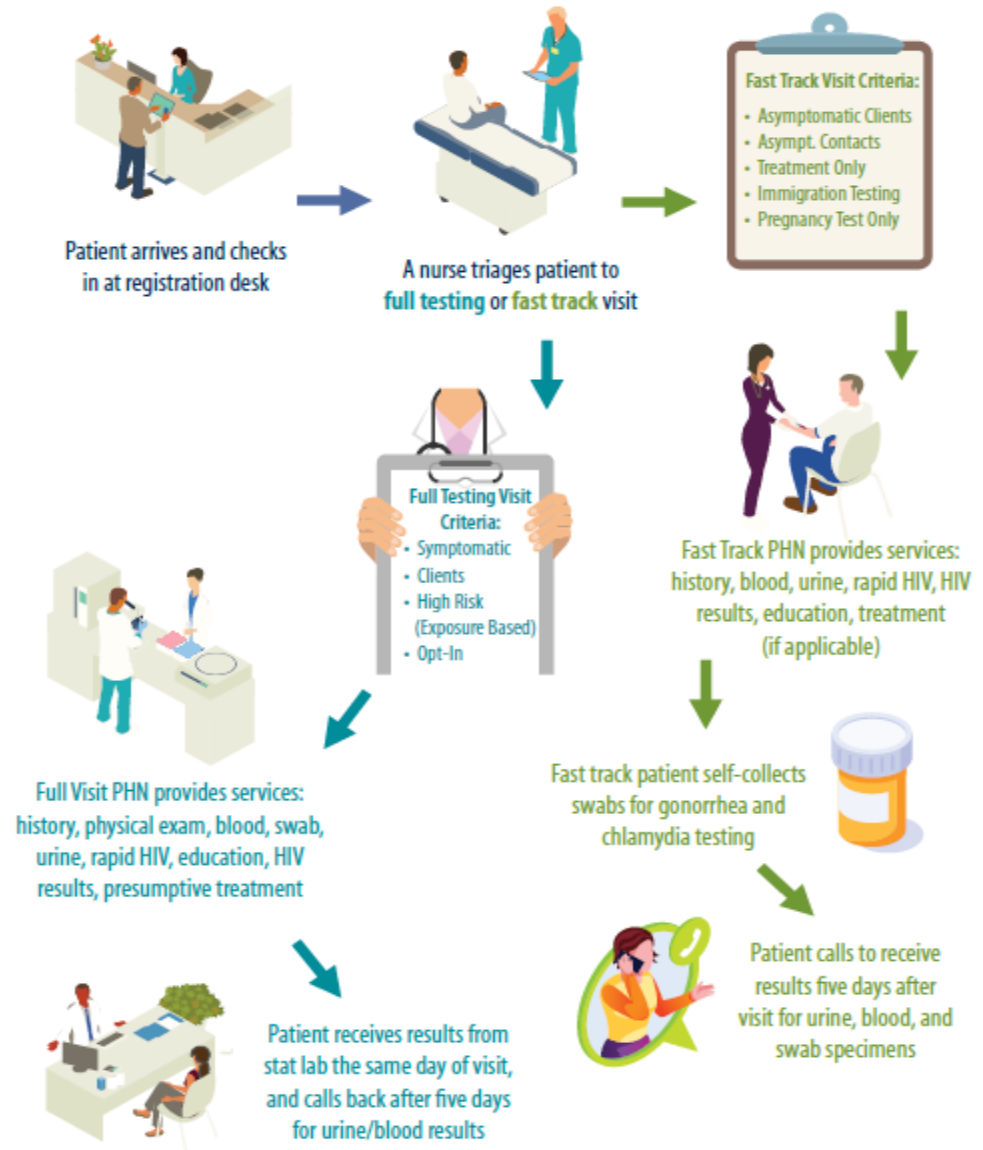
Model 1: The figure below describes one STI express model that a participating site implemented.
In this model, patients are triaged at registration. Note that here, new patients are not eligible for express services. Patients are also not provided counseling or any test results at their visit.



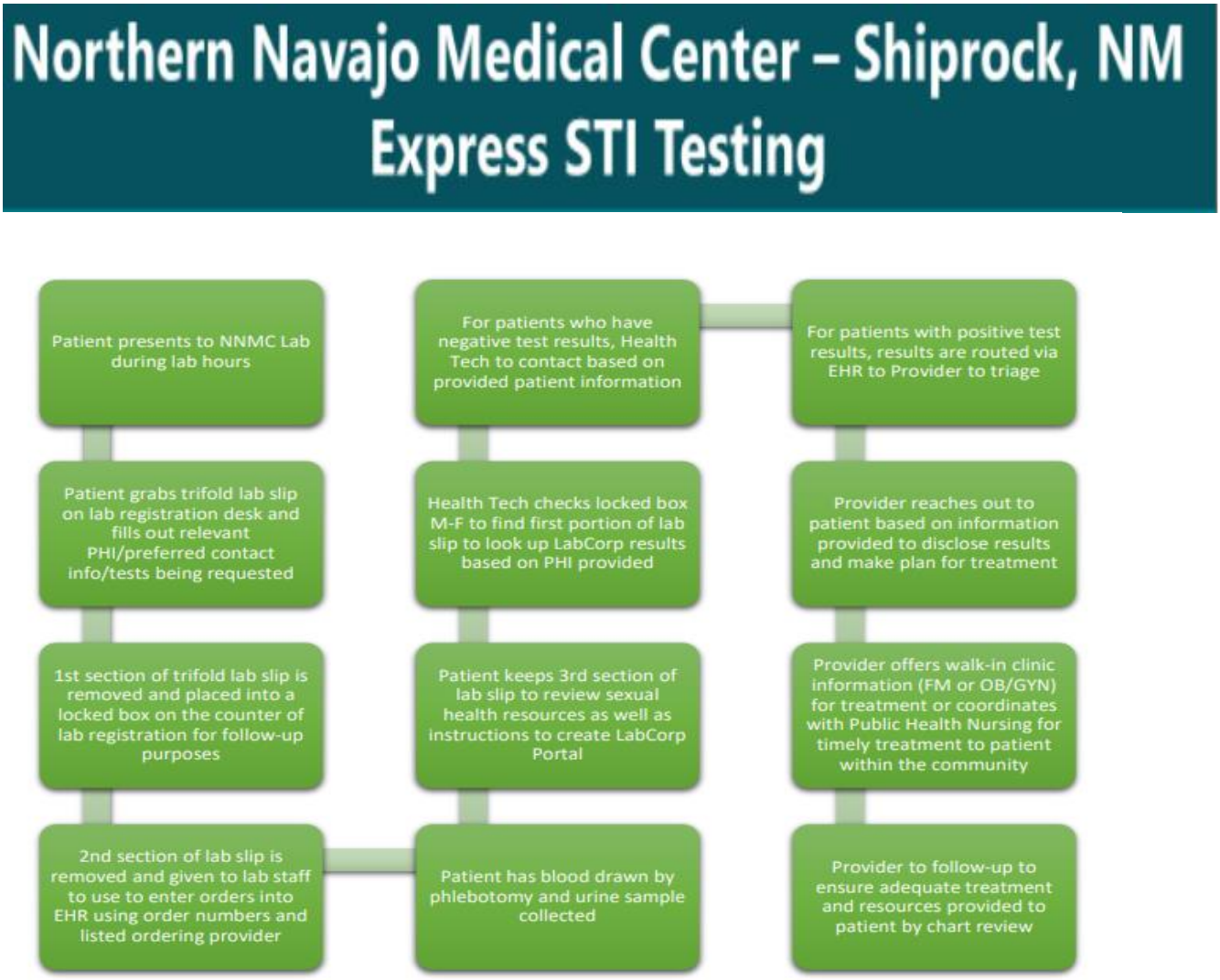
Appendix F Triage Nurse Point of Contact Workflow

Triage Nurse Point of Care Workflow

Model A. This model utilizes a triage nurse to route patients to express or non-express services. Fast track services are one of several less-intensive visit types, along with treatment-only visits and pregnancy testing.



Appendix H Laboratory Point of Contact Workflow and Policy



NNMC Express STI context and forms

1. A patient presents directly to the Laboratory during operating hours, requests testing (must be asymptomatic or will be directed to go to a clinic for an evaluation).
2. They fill out a paper form (I've attached) with relevant PHI, preferred contact info, and what tests they are requesting (right now just 3 options).
3. 1st third of the perforated paper is removed & placed in a locked box in the lab (w PHI, to be used to look for & track test results as below). Middle third is removed & given to the lab to use to enter the orders into the EHR using order numbers & listed ordering provider (this can be anyone who doesn't mind excess notifications they can ignore or erase, we are NOT using EHR notifications of results as our primary means to follow up these results).
4. Patient keeps the last/Right third of the ticket, they can follow the results themselves on Labcorp patient portal (at least for adults) and/or they can call the number listed if they haven't heard the results within 2 weeks (rings to a health tech in the Community health department who was previously responsible for giving covid test results).
5. 2-3 times per week, one of 3 Health technicians will stop by the lab, pick up any paper slips in the box with pt's PHI & contact info. They will then look up these patients in our EHR &/or Labcorp for these specific test results.
6. For patients with all results are negative, they will call &/or send a letter based on requested contact info to inform them of negative results.
7. For any positive results needing treatment (or if they are uncertain how to interpret them)- they will route these patients to one of 3 providers here to look at the results, order the appropriate medication treatment & contact the patient via their preferred methods to get them treatment (or further testing where appropriate). The provider consults depends on Pt's listed age (<18yo to pediatric provider) & listed gender (M vs. F in our EHR).
8. In certain cases, if providers have been unable to contact patients despite multiple attempts re: an STI, PHNs may be consulted to help find pt, given them diagnosis &/or ensure appropriate treatment.

NNMC is working to add a specific adolescent version of this that will have all confidential testing, however these will have different numbers for the Labcorp account & specific test, and will not be viewable in the Labcorp patient portal.

NNMC GOLDEN TICKET

Name: _____

Date of Birth: _____

IHS Chart Number: _____

☐ I want to be tested for Sexually Transmitted Infections today (Includes: testing for HIV, Syphilis, Gonorrhea, Chlamydia & Trichomonas)

For those with concerns about a sexually transmitted infection (STI) happening right now as you have symptoms or a recent exposure, it is recommended that you talk with your provider a full evaluation.

I prefer to be contacted with results by:

☐ Phone Number(s): _____

☐ Letter sent to mailing address: _____

_____

☐ I prefer to call in for my results to 505-368-6320

TEAR THIS SECTION OFF AND PLACE IN SECURE BOX IN LAB FOR FOLLOW-UP

LABORATORY SLIP

Name: _____

Date of Birth: _____

IHS Chart Number: _____

For NNMC Lab Staff:

Lab Order Number: _____
Lab Account # 30979612

Labs:

☐ HIV- 083935

☐ Syphilis- 012005

☐ Urine Gonorrhea/Chlamydia/Trichomonas- L183160

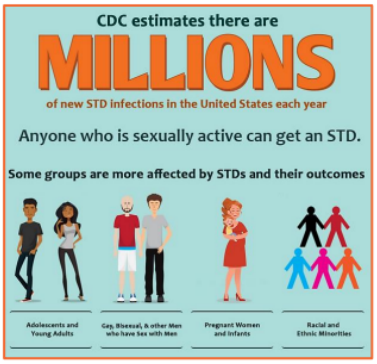
EHR/RPMS Location: HPDP STI Testing
Order under Leah Spatafore

TEAR THIS SECTION OFF AND GIVE TO THE FRONT DESK LAB STAFF OR PLACE ON LAB DESK

LEARN MORE ABOUT SEXUALLY TRANSMITTED INFECTIONS

STIs are preventable. There are steps you can take to keep yourself and your partner(s) healthy:

- ✓ Practice Abstinence
- ✓ Use Condoms
- ✓ Have Fewer Partners
- ✓ Get Vaccinated
- ✓ Talk With Your Partner
- ✓ Get Tested



LEARN MORE ABOUT HOW TO PROTECT YOURSELF BY VISITING THE FOLLOWING WEBSITES:

- **Center for Disease Control and Prevention:** www.cdc.gov/STD/
- **WE R NATIVE:** www.wernative.org/my-relationships/sexual-health

HOW TO FIND OUT LAB RESULTS

Get your test results online from LabCorp website

- Set up your own LabCorp account and get your results as soon as they are ready!
- The LabCorp Patient™ Portal allows you to view, download, and print your LabCorp test results as soon as the results are available.

Step 1: Create an account. Enter the link below into your web browser and fill out the registration information.
https://patient.labcorp.com/account/registration/register

Step 2: Look up your results by typing in the email address and password you created from the registration.
https://patient.labcorp.com/landing

- **If you are not able to sign up on LabCorp's website to look at your test results and you have not yet been contacted about test results two weeks after getting tested**, please call 505-368-6320 to receive your test results.
- **If any tests results are positive or you have questions on these results**---Please call NNMC Call Center to be transferred to your clinic to schedule an appointment for an evaluation & treatment
- **If any tests return positive, it is VERY important to not have sexual activity with your partner(s) & have you both evaluated & treated by a provider**.
- **Please contact your sexual partner(s) if you have positive test results** to let them know of potential infection & need for testing and treatment if you can do so safely. This will help stop the spread and reinfection of these sexually transmitted infections.

Appendix I Clinical Procedure for Collection of Pharyngeal, Rectal, Vaginal, Phlebotomy

PHARYNGEAL COLLECTION (for Chlamydia and Gonorrhea)

1. Specimens can be collected either by the clinician or the patient.
2. For patients opting to self-swab, instructions will be provided by the clinician.
3. Obtain supplies: Specimens are collected using the Gen-Probe APTIMA Combo2 Unisex Swab Collection Kit. Kits are stored at room temperature.
4. Use the small APTIMA testing swab, not the larger cleansing swab.
5. After opening the mouth, insert the swab and vigorously rub the tonsils and the posterior pharynx.
6. Carefully remove the swab, not touching any area of the mouth.
7. Insert the swab into the APTIMA transport tube and break off the swab at the score line.
8. Cap the tube tightly; label the tube with the patient's name and date of collection.
9. Record the specimen source on the label.

RECTAL SWAB (for Chlamydia and Gonorrhea)

1. 1. Specimens can be collected either by the clinician or the patient.
2. 2. For patients opting to self-swab, instructions will be provided by the clinician.
3. Obtain supplies: Specimens are collected using the Gen-Probe APTIMA Combo2 Unisex Swab Collection Kit. Kits are stored at room temperature.
4. Use the small APTIMA testing swab, not the larger cleansing swab.
5. Insert the swab approximately 3 – 5 cm into the rectum and rotate against the rectal wall several times (at least 3 times).
6. Swabs that are grossly contaminated with feces should be discarded and the collection repeated.
7. Carefully remove the swab, and insert the swab into the APTIMA transport tube.
8. Break off the swab at the score line, and cap the tube tightly.
9. Label the tube with the patient's name and date of collection.
10. Record the specimen source on the label.

VAGINAL SWAB (for Chlamydia and Gonorrhea)

1. Specimens can be collected either by the clinician or the patient.
2. For patients opting to self-swab, instructions will be provided by the clinician.
3. Obtain supplies: Specimens are collected using the Gen-Probe APTIMA Combo2 Unisex Swab Collection Kit. Kits are stored at room temperature.
4. Use the small APTIMA testing swab, not the larger cleansing swab.
5. Separate the labia and insert the swab into the vagina approximately 2 inches past the introitus.
6. Rotate the swab several times (at least 3 times) making sure the swab touches the walls of the vagina so that moisture is absorbed by the swab.
7. Carefully remove the swab, and insert the swab into the APTIMA transport tube.
8. Break off the swab at the score line, and cap the tube tightly.
9. Label the tube with the patient's name and date of collection.
10. Record the specimen source on the label.

URINE (for Chlamydia and Gonorrhea)

1. Preferably, the patient should not have urinated for at least one hour prior to specimen collection.
2. Direct patient to provide a first-catch urine (approximately 20 to 30 mL of the initial urine stream) into a urine collection cup free of any preservatives.
3. Collection of larger volumes of urine may result in specimen dilution that may reduce test sensitivity; lesser volumes may not adequately rinse organisms into the specimen.
4. Female patients should not cleanse the labial area prior to providing the specimen.
5. Add urine to the Aptima® Combo 2 urine collection device.
6. The final volume must be between the two black lines on the device (about 2 mL).

PHLEBOTOMY

POLICY STATEMENTS:

1. Nurses, phlebotomists, and technicians can perform venipuncture only after successful completion of required education and competency validation.
2. Routine venipuncture may be performed in the upper extremities. The usual sites for venipuncture in the antecubital area include the cephalic, basilic, median-cephalic, and median-basilic veins. EXCEPTION: Pediatric nurses may draw from the scalp and lower extremities.
3. For patient comfort and safety no more than two venipuncture attempts may be made by one practitioner. If two practitioners are unsuccessful, the ordering Physician/NP/PA is to be notified.
4. Reposition arm as tolerated to promote blood flow.
5. Perform venipuncture for phlebotomy on the opposite extremity of an infusion or a PICC line. If phlebotomy must be performed on the extremity with infusing solutions, a vein below or distal to the site of infusion should be used (INS, 2021).
6. A vascular access device may be used for the purpose of drawing blood specimens with the exception of blood cultures on any patient requiring blood sampling only when venipuncture is not feasible.
7. Needles are never to be re-capped.
8. The labeling of ALL specimens MUST BE DONE at the collection site and in the presence of the patient after performing patient verification and obtaining the specimen.
9. Before all procedures, perform hand hygiene and don gloves.

Peripheral Blood Specimen Collection

EQUIPMENT:

- Clean gloves
- Latex-free single use tourniquet
- Alcohol Pad, 70% Isopropyl
- Blood collection safety needle or adapter with safety Butterfly needle
- Blood Collection holder and insert if needed
- Adhesive bandage or 2x2 gauze with tape
- Appropriate bar code labels and/or laboratory requisition
- Specimen collection bag

PROCEDURE:

1. Verify order.
2. Perform hand hygiene.

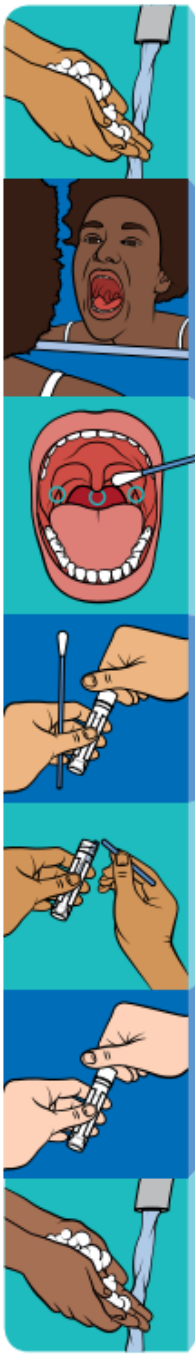
3. Verify patient according to standard Policy & Procedure
4. Don clean gloves.
5. Apply tourniquet and select appropriate vein by sight or palpation. When possible, have patient open and close fist “lightly”. *Note: Tourniquet application should not exceed one minute*
6. Cleanse site with alcohol pad for 5 seconds using friction in a back and forth motion. Allow area to air dry.
7. Attach butterfly needle with luer adapter to blood collection holder.
8. Support patient’s extremity while patient is in supine/sitting position.
9. Remove cover of needle and stabilize selected vein.
10. Hold the needle with bevel in upright position at 30-degree angle or less and puncture skin and vein in one motion.
11. NOTE: When using a butterfly needle, observe for flashback in tubing.
    a) If unsuccessful and needle is removed from the site, a new sterile needle is required for the second attempt.
    b) If patient complains of a shooting electrical pain sensation, tingling or numbness remove the needle immediately.
12. Secure the blood collection holder in place and insert tubes into holder to puncture the stopper.
13. Remove filled bottles and invert gently to mix
14. If additional specimens are required, insert additional blood tubes, as
15. directed above.
16. Release the tourniquet when all specimens are collected.
17. Withdraw needle slowly while simultaneously placing a gauze pad over the
18. venipuncture site and apply gentle pressure.
19. Verify safety mechanism on the needle has been activated.
20. Using 2x2 gauze apply firm pressure at puncture site to minimize bleeding.
21. Apply adhesive bandage or 2x2 with tape over venipuncture site.
22. Dispose of needle and holder in sharps container.
23. Attach patient’s ID label to each blood specimen tube at the point of
24. collection in the presence of the patient.

Reference: Infusion Nursing Standards of Practice (2021). *Journal of Intravenous Nursing*, *44*(1S) (Supplement to January/ February 2021).

Appendix J Oral Self-Collection Poster

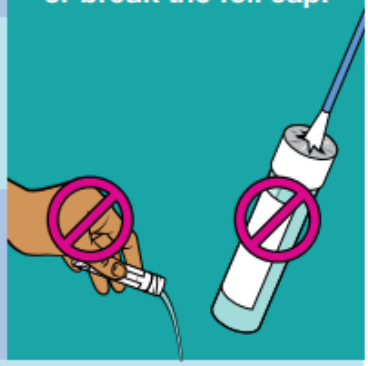
TESTING FOR
Sexually Transmitted Infections

How to Swab Your Throat



1. Wash your hands.
2. Open your mouth in front of a mirror and look at the back of your throat.
3. Gently rub the swab on the back of your throat. Make sure to swab the three circled areas.
4. Without putting down the swab, unscrew the cap.
5. Place the swab in the tube and break off the end of the swab.
6. Tightly screw the cap back on.
7. Wash your hands.

DO NOT pour out the liquid in the tube or break the foil cap.



NYC Health

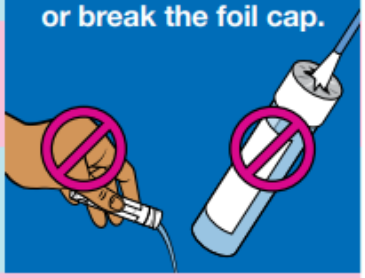
Appendix K Anal Self-Collection Poster

TESTING FOR
Sexually Transmitted Infections

How to Swab Your Anus

1. Wash your hands.
2. Get into a comfortable position.
3. Hold the swab 2 inches (5 centimeters) from the tip.
4. Insert the swab 1 inch (2.5 centimeters) into your anus.
5. Rotate the swab five times in your anus and remove it.
6. Without putting down the swab, unscrew the cap.
7. Place the swab in the tube and break off the end of the swab.
8. Tightly screw the cap back on.
9. Wash your hands.

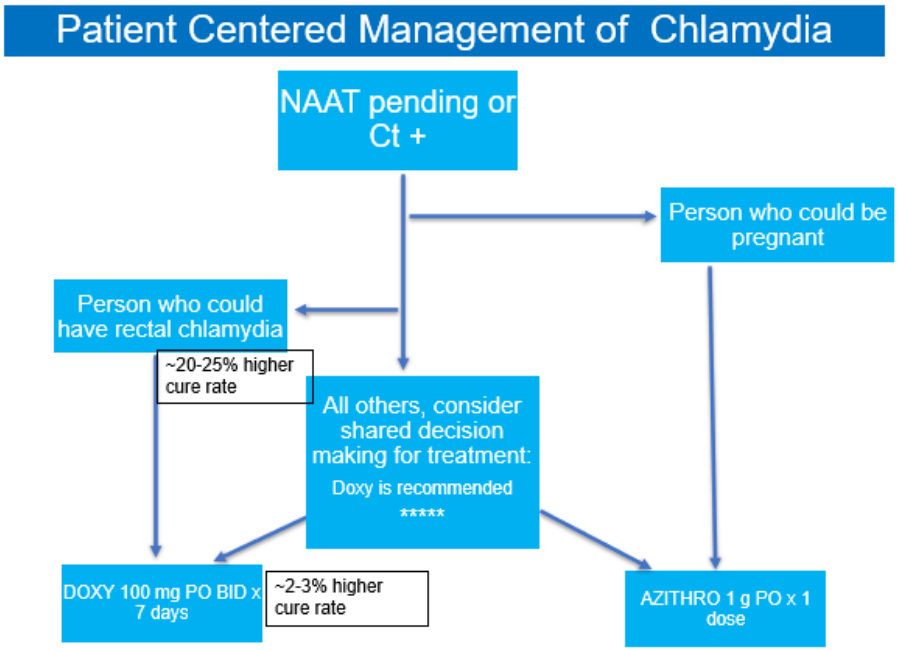
DO NOT pour out the liquid in the tube or break the foil cap.



NYC Health

Appendix L Vaginal Self-Collection Poster

Appendix M Chlamydia Azithromycin/Doxycycline Flowchart



Appendix N Ceftriaxone Treatment Procedure for Gonorrhea

Administration of Ceftriaxone for Treatment of Gonorrhea

Indications, Dosage and Administration

Ceftriaxone, for the treatment of Neisseria gonorrhea (cervical/urethral, pharyngeal and rectal):

- 500 mg IM, deep ventro/dorsogluteal
- Pain can be lessened when reconstituted with 0.9mL 1% lidocaine, based on manufacturer's instructions (alternate diluent is sterile water)

Contraindications

Ceftriaxone is contraindicated in patients with known hypersensitivity to ceftriaxone sodium, any component of the container or other cephalosporins. Ceftriaxone is a 3rd generation cephalosporin therefore safe for use in penicillin allergic patients.[1]

Lidocaine is contraindicated if client is sensitive or allergic to lidocaine or has a history of a reaction to local aesthetics.

Reconstitution Table

Vial Size	Volume Added to Vial	Approximate Available Volume	Approximate Average Concentration
0.5 g	0.9 mL	1.0 mL	0.5 g/mL

Shake well until dissolved.

Stability and Storage Recommendations

Ceftriaxone powder is stored at room temperature, 15-30°C. Solutions should be reconstituted immediately before use. If storage is required, these solutions should be refrigerated and used within 48 hours from time of reconstitution.

Reconstitution

1. Dilute single dose vials of ceftriaxone with 0.9 mL 1% lidocaine solution (or sterile water) using a 1 mL syringe. Total volume will be approximately 1 mL.
2. Discard syringe and needle used for drawing up lidocaine/sterile water.
3. Shake vial well until all powder is dissolved.
4. Draw up the diluted product in a 2 mL syringe.
5. Discard the needle used to draw up the medication and attach 1.5 inch 21 gauge needle to syringe.

Dorso or ventrogluteal muscle is recommended for administration. Following the injection, apply pressure until bleeding has ceased but do not massage the area. Patient should wait 15 minutes before leaving the facility to ensure no immediate adverse reaction.

[1] Anti-infective Review Panel. Anti-infective Guidelines for Community-acquired Infections. Toronto:MUMS Guideline Clearinghouse; 2013 page viii

Appendix O PCN Treatment Procedure for Syphilis

Administration of Penicillin G for Treatment of Syphilis

Indications, Dosage and Administration

It is important to have training on the injection of benzathine penicillin to ensure the correct anatomic administration site

Penicillin G, for the treatment of Treponema pallidum:

- Primary/Secondary/Early latent: 2.4 million units IM, once
- Late latent/Unknown duration: 2.4 million units IM, 3 doses, given 7 days apart
    - In pregnant people, if subsequent doses are missed by greater than 9 days, must restart entire series.
    - In non-pregnant people, if subsequent doses are missed by greater than 10-14 days (case dependent), must restart entire series.

1. Identify space is available that ensures privacy for the patient.
2. Administer Penicillin G 2.4 million units in divided doses of 1.2 million units by deep IM injection into each dorso or ventrogluteal site at the same visit.
3. When administering in the dorsogluteal site, only inject in the upper outer quadrant of the buttock. Do not inject into or near an artery or nerve. This link maps to a US-developed (UCSF) video on how to inject BPG:. How to inject Bicillin LA - Bing video
4. Use a 21 gauge, thin-wall 1-1/2 inch needle for administration, adjusting accordingly based on patient's muscle mass.
5. Because of the high concentration of suspended material, the needle may be blocked if the injection is not made at a slow, steady rate.
6. Following the injection, apply pressure until bleeding has ceased.
7. Patient should wait 15 minutes before leaving the facility to monitor for immediate adverse reaction.
8. If adverse reaction occurs while waiting in the facility, refer to anaphylaxis management protocol.
9. If symptoms occur after leaving the facility, instruct patients to seek emergency care immediately.

Contraindications

1. Penicillin G is contraindicated in patients with known hypersensitivity to penicillin.
2. However, fewer than 1% of the whole population are truly allergic to penicillin.
3. Approximately 80% of patients with IgE-mediated penicillin allergy lose their sensitivity after 10 years.
4. Correctly identifying those who are not truly penicillin-allergic can decrease unnecessary use of broad-spectrum antibiotics.
5. Evaluate the patient for a true penicillin allergy (IgE-mediated) by conducting a history and physical, and when appropriate, a skin test and challenge dose.

- History and physical: What kinds of reaction occurred? How long ago did the reaction occur? How was the reaction managed? What was the outcome?
    - Characteristics of an IgE-mediated (Type 1) reaction: **Occur immediately or usually within one hour**. Hives, angioedema, wheezing and shortness of breath, anaphylaxis.
    - Anaphylaxis: Requires **at least two of the following symptoms**: Skin (hives, flushing, itching, angioedema), Respiratory (cough, nasal congestion, shortness of breath, chest tightness, wheezing, choking, change in voice quality), Cardiovascular (hypotension, syncope, tachy/bradycardia, tunnel vision, chest pain, sense of impending doom, loss of consciousness), Gastrointestinal (nausea, vomiting, cramping, diarrhea)
- Penicillin Skin Test
- Challenge Doses

6. If penicillin allergy is ruled out, remove from allergy list on patient's electronic health record
7. Pregnant people with confirmed hypersensitivity to penicillin, should be desensitized to receive penicillin.

Stability and Storage Recommendations

Penicillin G is stored at refrigerated temperatures, 2-8^{o}C, keep from freezing.
To help with injection related pain, Penicillin G can be taken out of the refrigerator and warmed to room temperature immediately before administration (do not use heat packs).

Side Effects

- May experience mild, temporary pain at the injection site.
- May experience diarrhea following treatment.
- **Jarisch-Herxheimer reaction**: fever, chills, headache, or fatigue
    - A Jarisch-Herxheimer reaction is a set of temporary side effects that may occur within a few hours after treatment of early syphilis, although not everyone will have this reaction.
    - Do not be alarmed, this is **not an allergic response** and usually ends in 24 hours.
    - Take acetaminophen or ibuprofen as directed by your clinician, if needed to help relieve symptoms.
    - This reaction rarely occurs after treatment of late syphilis.
- If any of these effects persist or worsen, instruct patient to contact their healthcare provider.

Appendix O Protocol for Treatment of Anaphylaxis

Protocol for Treatment of Anaphylaxis

I. Early Recognition of Anaphylaxis

A. Because anaphylaxis requires immediate treatment, diagnosis is primarily made based on recognition of clinical signs and symptoms. Signs and symptoms in adults and children include:

a. Respiratory: sensation of throat closing or tightness, stridor (high-pitched sound while breathing), hoarseness, respiratory distress (such as shortness of breath or wheezing), coughing, trouble swallowing/drooling, nasal congestion, rhinorrhea, sneezing
b. Gastrointestinal: nausea, vomiting, diarrhea, abdominal pain, or cramps
c. Cardiovascular: dizziness; fainting; tachycardia (abnormally fast heart rate); hypotension (abnormally low blood pressure); pulse difficult to find or "weak"; cyanosis (bluish discoloration); pallor; flushing
d. Skin/mucosal: generalized hives; widespread redness; itching; conjunctivitis; or swelling of eyes, lips, tongue, mouth, face, or extremities
e. Neurologic: agitation; convulsions; acute change in mental status; sense of impending doom (a feeling that something bad is about to happen)
f. Other: sudden increase in secretions (from eyes, nose, or mouth); urinary incontinence

B. Anaphylaxis should be considered when signs or symptoms are generalized (i.e., if there are generalized hives or more than one body system is involved) or are serious or life-threatening in nature, even if they involve a single body system (e.g., hypotension, respiratory distress, or significant swelling of the tongue or lips).

C. Symptoms of anaphylaxis often occur within 15-30 minutes of medication administration, though it can sometimes take several hours for symptoms to appear. Early signs of anaphylaxis can resemble a mild allergic reaction, and it is often difficult to predict whether initial, mild symptoms will progress to become an anaphylactic reaction. In addition, symptoms of anaphylaxis might be more difficult to recognize in people with communication difficulties, such as long-term care facility residents with cognitive impairment, those with neurologic disease, or those taking medications that can cause sedation. Not all symptoms listed above are necessarily present during anaphylaxis, and not all patients have skin reactions.

D. If anaphylaxis is suspected, administer epinephrine as soon as possible, contact emergency medical services, and transfer patients to a higher level of medical care. In addition, instruct patients to seek immediate medical care if they develop signs or symptoms of an allergic reaction after their observation period ends and healthcare providers have left.

II. Management of anaphylaxis in the field

If anaphylaxis is suspected, take the following steps:

a. Rapidly assess airway, breathing, circulation, and mentation (mental activity).
b. Call for emergency medical services (EMS).
c. Place the patient in a supine position (face up), with feet elevated, unless upper airway obstruction is present, or the patient is vomiting.

d. **Epinephrine (1 mg/ml aqueous solution [1:1000 dilution]) is the first-line treatment for anaphylaxis and should be administered immediately.**
e. **In adults, administer a 0.3 mg intramuscular dose using a premeasured or prefilled syringe, or an autoinjector, in the mid-outer thigh (through clothing if necessary).**
f. **The maximum adult dose is 0.5 mg per dose.**
g. **A dose of epinephrine may be repeated approximately every 5-15 minutes** if symptoms do not improve or if they return while waiting for EMS. The number and timing of epinephrine doses should be recorded and communicated to EMS.
h. Because of the acute, life-threatening nature of anaphylaxis, there are no contraindications to epinephrine administration.
i. Antihistamines (e.g., H1 or H2 antihistamines) and bronchodilators do not treat airway obstruction or hypotension and, thus, are not first-line treatments for anaphylaxis. Although they can help provide relief for hives and itching (antihistamines) or symptoms of respiratory distress (bronchodilators), in a patient with anaphylaxis they should only be administered after epinephrine.
j. Because anaphylaxis may recur after patients begin to recover, monitoring in a medical facility for at least four hours is advised, even after complete resolution of symptoms and signs.
k. Considerations for anaphylaxis management in special populations (see below for Older Adults and Homebound People).

III. Older Adults

There are no contraindications to the administration of epinephrine for the treatment of anaphylaxis. Although adverse cardiac events, such as myocardial infarction or acute coronary syndrome, have been reported in some patients who received epinephrine for treatment of anaphylaxis (particularly among older adults with hypertension and/or atherosclerotic heart disease), epinephrine is the first-line treatment for anaphylaxis. It is important that locations such as long-term care facilities, have staff members available who are able to recognize the signs and symptoms of anaphylaxis. This will help not only to ensure appropriate and prompt treatment for patients with anaphylaxis, but also to avoid unnecessary epinephrine administration to patients who do not have anaphylaxis.

IV. Homebound people requiring home services

Homebound people who might be at increased risk for anaphylaxis following anti-bacterial administration (i.e., people with those with a history of anaphylaxis due to any cause) should consider transport to a setting where medical care is immediately available in the event of anaphylaxis following administration. If home anti-bacterial administration is the only option for the identified patient, and through risk assessment, it is determined that the benefits of anti-bacterial administration at home outweigh the potential risk for anaphylaxis, healthcare providers (PHN, STI, CHR, MVO) should ensure they are able to manage anaphylaxis. This includes appropriate screening, post-administration observation, medications and supplies, staff qualifications for recognition and treatment of anaphylaxis, ability to call for EMS, and location in an area where EMS is available.

V. Patient counseling

Patients who experience a severe allergic reaction (e.g., anaphylaxis) after a dose of anti-bacterial medication should be instructed not to receive additional doses of the same anti-bacterial medication.

VI. Documentation

Any severe allergic reaction should be promptly documented in the patient's EHR for future reference.

References:

1. Evaluation and Diagnosis of Penicillin Allergy for Healthcare Professionals | Antibiotic Use | CDC
2. https://labeling.pfizer.com/ShowLabeling.aspx?id=691
3. Management of Anaphylaxis at COVID-19 Vaccination Sites | CDC