Clinical resources

CDC recommendations for providing quality STD clinical services

By Shelagh B. Larson, DNP, APRN, WHNP-BC, NCMP

ver 2 decades ago, the 1997 Institute of Medicine report on confronting sexually transmitted diseases (STDs) described STDs as "hidden epidemics of tremendous health and economic consequence in the United States" and further noted that the "scope, impact, and consequences of STDs are under recognized by the public and in healthcare."¹ Today, these statements still ring true. More than 1 million STDs are acquired every day worldwide.² In 2018, combined cases of syphilis, gonorrhea, and chlamydia reached an all-time high after rising for the 5th consecutive year in the United States. Between 2014 and 2018, cases of chlamydia, one of the most common STDs, increased by 15%, yet gonorrhea increased by 35% and syphilis increased by 50%.³ Numerous barriers exist to screening and treatment for STDs. These barriers include limited resources, stigmatization, poor quality of services, and little or no follow-up of sexual partners.² When left untreated, these infections can cause infertility and poor pregnancy and birth outcomes. As well, when untreated, these infections can increase the risk of acquiring new or transmitting existing STDs, especially human immunodeficiency virus (HIV).⁴ Increasing the availability of timely, guality STD services in both primary care settings and specialty STD care settings can help persons live safer, healthier lives. This article highlights recommended STD clinical services described in the 2020 Centers for Disease Control and Prevention (CDC) report "Recommendations for Providing Quality STD Clinical Services," hereafter referred to as the STD QCS.⁴ Although the STD QCS outlines recommendations for both basic and specialty STD services, the focus of this discussion will be on basic services that should be available in all clinical settings that provide primary care.

The STD QCS was developed by the CDC to address the need for national guidance on providing quality STD care. The recommendations in this report are intended to be used with the current CDC STD guidelines for testing and treatment.⁵ The STD QCS is not intended to replace the STD guidelines for testing and treatment but to complement and enhance the delivery of STD services by assisting clinics to identify resource gaps and guide the development of clinical operations policies.⁴ The *Figure* provides a side-by-side comparison of the focus of each of these two documents.⁶

The STD QCS provides the framework for the development of clinic-level policies like standing orders, specimen panels, fast-track visits, and reflex testing that can facilitate the implementation of STD diagnosis and treatment.⁴ The report separates care into the categories of basic STD care and specialty STD care. Basic STD care is provided in primary care settings where patients are seen for a variety of health issues. Examples of these settings include ob/gyn offices, school-based health centers, community health centers, family planning clinics, and health clinics in prisons. Because many patients with STDs are asymptomatic, basic STD services provided in primary care settings increase opportunities for early identification and treatment of patients and their partners.

Specialty STD care is provided in clinics that concentrate on providing comprehensive, confidential, and culturally sensitive STD services. The services in these settings go beyond those typically available in primary care settings. If a patient needs inpatient care or invasive, diagnostic testing, a referral to an STD specialist is required.

STD QCS framework

STD QCS recommendations are summarized in eight sections: 1) sexual history and physical examination, 2) prevention, 3) screening, 4) partner services, 5) evaluation of STD-related conditions, 6) laboratory tests, 7) treatment, and 8) referral to a specialist for complex STD or STDrelated conditions.⁴ Each section describes recommended services by settings as basic or specialty care. Within the categories of basic and specialty care, recommendations in each section are designated as "should" or "could." A "should" designation indicates a strong recommendation that all or most informed providers would follow. A "could" designation is a weaker recommendation indicating that most informed providers would choose to follow but some would not.

Sexual history and physical exam

A good sexual history is vital to assessing STD risk. A complete sexual history includes addressing the five Ps (ie, partners, practices, protection, past history of STDs, and prevention of pregnancy).⁵ The CDC provides a guide on how to take a sexual history, with tips for addressing each of the five Ps.⁷ In the primary care setting, the sexual history and risk assessment should be part of every comprehensive initial or annual visit; a visit for reproductive, genital, or urologic issues; or a visit for STD-related symptoms, STD-related concerns, or concerns about preventing or achieving pregnancy.

The physical exam allows providers the opportunity to identify the presence of any signs of STDs about which a patient might or might not be aware. Basic STD services should include a physical exam for patients with STD-related symptoms, STD-related concerns, or those at high behavioral risk for STDs. Careful assessment of the skin, hands, feet, pharynx, tongue, lips, lymph nodes, anogenital area, and neurologic system will give the provider useful information among males and females with STD-related symptoms. Some primary care settings have anoscopes available to assist in visualization of the anal canal for patients with rectal symptoms or a history of receptive anal intercourse.

Prevention

The STD QCS outlines basic STD preventive care services that should be available in the primary care setting. These are hepatitis B vaccination and human papillomavirus (HPV) vaccination provided on-site or by referral; brief single STD/HIV prevention counseling session up to 30 minutes; HIV pre-exposure prophylaxis (PrEP) and HIV nonoccupational post-exposure prophylaxis (nPEP) risk assessment, education, and referral or link to HIV care; emergency contraceptive pills available on-site or by prescription; brief contraceptive counseling on-site or by referral; and referral or link to HIV care, family planning services, and behavioral services if indicated. Additional STD preventive services that could be provided in the primary care setting include on-site condom provision, on-site hepatitis A vaccination, provision of PrEP and/or nPEP, and moderate-intensity STD behavioral counseling (> 30 minutes).⁴ STD risk reduction counseling can be used by healthcare providers to effect patient behavioral changes. This counseling can differ in time allotment, number of sessions, and strategies used from brief to complex. Brief, single sessions of less than 30 minutes use strategies such as motivational interviewing, building rapport, and shared decision making that address the patient's circumstances and needs. Single moderate-intensity counseling sessions of 30 or more minutes can also be provided in the primary care setting by trained staff.⁴

Screening

Many STD infections are asymptomatic, so access to screening is essential. Screening allows for early detection of STDs, treatment, and prevention of transmission

to other persons. Screening for the following STDs should be available as basic STD care services in the primary care setting: gonorrhea, chlamydia, syphilis, hepatitis B, hepatitis C, HIV, cervical cancer, and possibly trichomoniasis. A table summarizing screening recommendations for women, pregnant women, men, men who have sex with men, and persons with HIV is available on the CDC website.^A

Partner services

Notification and treatment of sex partners is necessary to interrupt transmission and prevent reinfection. In the primary care setting, basic partner services should include guidance for the patient regarding notification and care of sex partners. Interactive counseling for partner notification in which the provider and patient develop an individualized plan to notify the patient's sex partner(s) can be provided in the primary care setting. It is typically conducted by staff with special training in communication, interviewing, and/or counseling. Expedited partner therapy (EPT) (where legal and where local or state jurisdictions do not prohibit by regulation) should be available.

EPT is the clinical practice of treating the sex partners of patients diagnosed with chlamydia or gonorrhea by providing prescriptions or medications to the patient to take to his/her partner without the healthcare provider first examining the partner.⁸ EPT is legally permissible in 45 states, potentially allowable in 4 states and Puerto Rico, and currently prohibited in 1 state.⁹ EPT typically is recommended for sex partners of patients who have received a diagnosis of chlamydia or gonorrhea, or both, and who are unlikely to have access to timely care.⁹ Detailed information on the current legal status of EPT in each state is available at cdc.gov/std/ept/legal/default.htm.^B

Treatment regimens for EPT are the same as for those in the clinical setting, with the exception of gonorrhea. Because medication given by injection is not possible for EPT, treatment for gonorrhea for a partner is cefixime 800 mg orally in a single dose plus azithromycin 1 g orally in a single dose.

Evaluation of STD-related conditions

STD-related conditions are those in which signs or symptoms may be caused by an STD. STDs that may be characterized by vaginal or cervical discharge and/or dysuria include chlamydia, gonorrhea, and trichomoniasis. In men, urethritis syndrome can be caused by gonorrhea, chlamydia, mycoplasma, trichomoniasis, herpes simplex virus, or a urinary tract infection. Pharyngitis can

Box 1. Recommendations for evaluation of STDrelated conditions in primary care settings⁶

Evaluation (history and examination) for the following STD-related conditions *should* be available as basic STD care services:

Genital ulcer disease Male urethritis syndrome Vaginal discharge PID Genital warts Proctitis Ectoparasitic infections Pharyngitis Epididymitis Systemic or dermatologic conditions compatible with or suggestive of an STD etiology

PID, pelvic inflammatory disease; STD, sexually transmitted disease.

Box 2. Laboratory recommendations for basic STD care in primary care settings⁶

The following general services, equipment, or tests should be available at time of patient visit: Thermometer pH paper The following general services, equipment, or tests could be available with test results available during patient visit: Phlebotomy Tests for trichomoniasis, bacterial vaginosis, vulvovaginal candidiasis Urine dipstick Urinalysis with microscopy Test for pregnancy Test for HIV The following tests should be available through a clinical laboratory: Urogenital NAAT for gonorrhea and chlamydia Extragenital (pharynx and rectum) NAAT for gonorrhea and chlamydia Quantitative nontreponemal serologic test for syphilis Treponemal serologic test for syphilis HSV viral culture or PCR HSV serology Fourth-generation antigen/antibody HIV test Oncogenic HPV NAATs with Pap smear Serologic tests for hepatitis A, B, C Test for pregnancy The following tests *could* be available through a clinical laboratory: Gram stain, methylene blue, or gentian violet stain for urethritis Gonorrhea culture Gonorrhea antimicrobial susceptibility testing NAAT for trichomoniasis

HIV, human immunodeficiency virus; HPV, human papillomavirus; HSV, herpes simplex virus; NAAT, nucleic acid amplification tests; PCR, polymerase chain reaction; STD, sexually transmitted disease.

be caused by strep infection, a virus, or an STD. Without a sexual history and appropriate physical exam, many symptoms can be misdiagnosed for other diseases or infections. *Box 1* lists the STD-related conditions for which evaluation (history and examination) should be available in the primary care setting.⁶

Laboratory tests

Screening tests are the only method for identifying asymptomatic infections. For patients with STD-related symptoms, both a physical examination and laboratory testing are needed along with a sexual history and risk assessment to determine the possible cause of symptoms and provide an opportunity for the diagnosis of other unrecognized infections.⁶ US Food and Drug Administration-approved testing should be used for screening and diagnostic purposes. Point-of-care testing with same-day results is ideal.

The implementation of structural-level policies in clinical settings, such as standing orders for the registration staff, express visits, specimen panels, and reflex testing, can improve diagnosis and treatment rates.⁶ *Box 2* lists tests that should and could be available in the primary care setting as part of basic STD services, both through a clinical laboratory and through point-of-care testing with results available during the patient visit.⁶

Treatment

Although the STD QCS does not address treatment modalities, it does address the availability of on-site treatments that should or could be available in basic and specialty STD care settings. Same-day treatment is ideal for patients and their partners. Prompt treatment reduces the occurrence of complications, further transmission, and reinfections. In primary care settings, the following treatments could be available on-site: recommended medications for chlamydia and gonorrhea, medications used as first-line therapies for STD-related conditions (urethritis, cervicitis, pelvic inflammatory disease, epididymitis, and proctitis), recommended medications for syphilis, emergency contraceptive pills, PrEP, nPEP, and provider-applied regimens for genital warts.⁴ If medications are not available on-site, they should be available by prescription.

Referral to a specialist

The STD guidelines indicate certain conditions that should be managed through referral to a specialist who has extensive training or experience in diagnosing, treating, and providing follow-up for complex STD cases.⁵ These providers include adult and pediatric infectious disease providers, maternal-fetal medicine specialists, allergists, ophthalmologists, head and neck surgeons, gastroenterologists, colorectal surgeons, urologists, oncologists, and other specialists. The STD QCS includes a list that outlines recommendations on referral to a specialist for complex STDs or STD-related conditions.⁴

Quality STD Clinical Services (STD QCS)	STI Treatment Guidelines
Roadmap for providing optimal clinical care services	Roadmap for managing people with or at risk for infection
Focuses on providing guidance related to assessment and evaluation by clinical setting	Focuses on assessment and evaluation of people with or at risk for infection
Outlines prevention services to have available by clinical setting	Provides guidance on recommended strategies for STI prevention
Identifies laboratory tests to have available by clinical setting	Indicates laboratory tests that are used for diagnosing people with infection
Highlights treatments to have available by clinical setting	Outlines STI treatment

Conclusion

The STD QCS is the how-to in providing STD care. In the past, there was not a consistent plan across clinical settings on how to deliver this care. This report provides guidance and complements CDC's STD guidelines for testing and treatment. It outlines services for coherent policies and standing orders for STD risk assessment, prevention, diagnosis, and treatment of patients and sex partners in the primary care and specialty care settings. The STD QCS emphasizes the importance of providing STD care in both primary care and specialty care settings as crucial to decrease what has been a rising incidence of STDs. In particular, in primary care settings, the recommendations give healthcare providers the opportunity to assess what services are currently provided in their clinical setting and what additional services could or should be made available on-site or by referral. The CDC provides numerous resources for providers and staff to expand knowledge and skills in STD care. CDC will update STD QCS recommendations as more evidence becomes available and new practice standards are implemented.

Shelagh B. Larson is with the Acclaim Physician Group in Fort Worth, Texas. The author has no actual or potential conflicts of interest in relation to the contents of this article.

References

1. Institute of Medicine Committee on Prevention and Control of Sexually Transmitted Diseases. *The Hidden Epidemic: Confronting Sexually Transmitted Diseases, Sum-* *mary.* Eng TR, Butler WT, eds. Washington, DC: National Academies Press; 1997.

- 2. World Health Organization. Sexually transmitted infections (STIs). June 14, 2019. https://www.who.int/news-room/fact-sheets/detail/sexually-transmitted-infections-(stis).
- Centers for Disease Control and Prevention. Sexually transmitted disease surveillance 2018. July 30, 2019. https:// www.cdc.gov/std/stats18/toc.htm.
- Barrow RY, Ahmed F, Bolan GA, Workowski KA. Recommendations for providing quality sexually transmitted diseases clinical services, 2020. *MMWR Recomm Rep.* 2020;68(5):1-20.
- Workowski KA, Bolen GA; Centers for Disease Control and Prevention. Sexually transmitted diseases treatment guidelines, 2015. *MMWR Recomm Rep.* 2015;64(RR-03):1-137.
- Centers for Disease Control and Prevention. Division of STD Prevention. CDC's Recommendations for Providing Quality STD Clinical Services, 2020. Webinar. January 28, 2020. https://www.cdc.gov/std/qcs/quality-std-clinical-services-recommendations-slideset-webinar-1-28-2020.pdf.
- Centers for Disease Control and Prevention. A Guide to Taking a Sexual History. https://www.cdc.gov/STD/treatment/SexualHistory.pdf.
- 8. Centers for Disease Control and Prevention. *Expedited Partner Therapy in the Management of Sexually Transmitted Diseases: Review and Guidance*. Atlanta, GA: US Department of Health and Human Services; 2006.
- Centers for Disease Control and Prevention. Legal status of expedited partner therapy (EPT). May 11, 2020. https:// www.cdc.gov/std/ept/legal/default.htm.

Web resources

A. cdc.gov/std/treatment-guidelines/

B. cdc.gov/std/ept/legal/default.htm