
TelePrEP

Telemedicine for HIV Prevention



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Background and definitions

Pre-exposure prophylaxis (PrEP) for HIV refers to the use of antiretroviral medication by people without HIV to prevent acquiring the infection through sex or injection drug use. PrEP is recommended by the Centers for Disease Control and Prevention (CDC) for those at high risk for HIV [1]. Of people with indications for PrEP in the United States, a majority are cisgender gay, bisexual, or other men who have sex with men (MSM) [2]. Two oral medications are currently FDA-approved for PrEP in the United States, emtricitabine/tenofovir disoproxil fumarate (TDF/FTC, Truvada) and emtricitabine/tenofovir alafenamide (TAF/FTC, Descovy), though additional agents, including long-acting injectable medications [3], are in development. Current PrEP guidelines call for HIV testing every three months for people taking PrEP, along with screening for sexually transmitted infections (STIs) for MSM and others at high risk for STIs [1].

Telemedicine refers to the use of telephone or video visits between a clinician and a patient in lieu of in-person visits. To avoid SARS-CoV-2 transmission within healthcare settings and comply with stay-at-home orders, adoption of telemedicine surged in response to the Covid-19 pandemic, with approximately one-third of all patients visits at health centers in late 2020 occurring via telemedicine [4]. TelePrEP is the use of telemedicine specifically for PrEP. Although the Covid-19 pandemic also bolstered telePrEP [5,6], telePrEP predated the pandemic [7]. An overview of state-based telePrEP programs can be found at: <https://www.nastad.org/maps/state-specific-tele-prep-services>.

Advantages and challenges of telePrEP

TelePrEP offers multiple advantages for patients and clinicians. Several core activities of PrEP provision – assessing risk for HIV and indications for PrEP, counseling about the risks and benefits of the medication, evaluating and counseling about adherence – are amenable to telemedicine. In addition, telePrEP may increase PrEP access for people who live far from clinics offering PrEP or who otherwise face transportation or schedule constraints that make in-person appointments impossible or inconvenient. TelePrEP may also help overcome confidentiality concerns or stigma that prevent some people from seeking PrEP care in person.

However, telePrEP also poses numerous challenges. Some patients do not have smartphones or computers, or they lack reliable internet connections. Assessing risk for HIV entails eliciting histories of sexual behavior and drug use [1], and some people may lack a private area from which to engage in these discussions over telephone or video. These concerns may be particularly prominent for sexual and gender minority people who are not “out” to those around them. In addition, all currently available PrEP medications require baseline laboratory testing prior to initiation and then at least every 3 months thereafter [1]. While at-home testing may overcome this barrier to telePrEP (see below), at-home testing may not be covered by insurance or otherwise affordable for some patients, and home delivery of test kits may also introduce confidentiality concerns. Finally, many people taking PrEP experience a substantial risk for non-HIV STIs [8]. Although many non-HIV STIs are asymptomatic and thus detected on screening only, STIs may present with genital ulcers, urethral discharge, rash, proctitis, and/or other symptoms which are optimally assessed and treated in person [9]. First-line therapies for two common STIs, gonorrhea and syphilis, are injectable and thus generally administered by healthcare workers, limiting telemedicine-based treatment [10].

Best practices for telePrEP

Clinicians and PrEP programs can take key steps to overcome challenges to telePrEP and maximize the availability and benefits of this care delivery option..

- Clinicians should follow best practices in telemedicine, including ensuring that they conduct telePrEP visits over secure connections, from a private setting and, if video is used, with a professional background [11].
- For physical examinations in which a medical chaperone would be present during an in-person visit (e.g., examination of the genitals to evaluate a genital ulcer), consider engaging a video chaperone. This could be a healthcare worker at the same location as the clinician or a healthcare worker who joins the videoconference from another location.
- TelePrEP should maintain the HIV, STI, and other PrEP-related testing schedule recommended by CDC [1]. Options for testing as part of telePrEP include:
 - **Visits for specimen collection only, with all other aspects of PrEP care provided by telemedicine.** This may be the least expensive option for some patients who rely on publicly-funded HIV and STI testing.
 - **Home delivery of test kits.** In this strategy, patients self-collect specimens, package them, and mail them to a clinic or laboratory for processing. In a pilot study of home self-testing, a majority of participants preferred at-home testing to clinic visits, and approximately one-third believed at-home testing would help them persist in PrEP care [12]. Several companies and some governmental programs offer at-home test kits for PrEP [13], with the costs of testing billed to health insurance or state assistance programs. With this option, clinicians should recommend kits that align with CDC-recommended testing (i.e., they should provide the option for 3-site – pharyngeal, genital, and rectal – testing for gonorrhea and chlamydia) [1,10].
- Clinicians should preserve access for in-person visits should they be warranted or preferred by a patient.
- Clinicians and healthcare administrators should stay abreast of developments in telemedicine. Regulations and reimbursement for telemedicine are likely to evolve over time and may vary from state to state. For example, many states permitted telemedicine visits across state lines (i.e., with the clinician located in one state and the patient in another at the time of the visit) during the Covid-19 pandemic, but these waivers will expire as the pandemic wanes [14]. For the most up-to-date guidance, clinicians should consult their licensing authorities and local medical societies.



Summary

Providing PrEP through telemedicine - telePrEP - is an evolving care option that may improve access, convenience, and adherence for some PrEP users or potential users. One of the primary implementation challenges of telePrEP is obtaining specimens for routine HIV, STI, and other PrEP-related testing. However, this can be overcome by offering home test kits or visits for specimen collection only. TelePrEP is a key strategy to help scale up PrEP in the United States.

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