

Requiring insurers to pay for home sexually-transmitted infection (STI) and HIV test materials makes sense medically and will likely reduce STIs and HIV

The disease burden is high

- Similar to national trends, bacterial STIs including gonorrhea and chlamydia have been steadily increasing in Maryland since 2010 with approximately 38,000 chlamydia cases and 12,000 gonorrhea cases reported in 2019 (last year with data available)
- In the past 10 years, HIV incidence has been decreasing in Maryland, with 724 new diagnoses reported in 2020; unfortunately, this is still far from zero

Self-collecting samples at home is simple and accurate

- The collection process has no need for a healthcare provider
- Gonorrhea and chlamydia
 - In a clinic, providers apply a swab (gently rub a fiber-tipped device that looks like a Q-tip) to the throat, vagina, rectum, or penis to collect a sample
 - Providers then mail the swab to a lab for PCR-type testing within several days
 - Test results are extremely accurate (>95% sensitivity and specificity; more accurate than PCR tests for SARS-CoV-2)
 - People self-collect swab specimens identically to how providers do
 - Self-collected swabs capture samples equally as well as provider-collected swabs
 - People generally prefer self-collection to provider-collection
 - Mailing swabs from home has proven simple and reliable for over a decade in publicly-funded services such as *I Want The Kit* (<https://iwantthekit.org/>)
 - Persons receiving positive results at home reliably seek treatment
- HIV
 - FDA-approved home kit uses saliva and provides a result within 15-20 minutes on a device that resembles a home COVID test or pregnancy test
 - Results with 92% accuracy

Increased sample collection at home will likely break transmission chains and reduce the long-term consequences of bacterial STIs and HIV

- Analogous to using testing to interrupt COVID transmission
- All three infections are asymptomatic the majority of the time, and transmission generally occurs while people are asymptomatic
- Gonorrhea and Chlamydia
 - In women and men can progress to cause pain at the local site of infection
 - In some women lead to devastating consequences including tubal abscesses, acute or chronic pelvic pain, and infertility
 - Diagnosing infections and getting cured prevent transmission to others and progression to these severe outcomes in women

- HIV
 - Untreated, will progress to severe immunodeficiency and death
 - Treated, it is not transmissible via sex, and people can expect to live a normal, healthy life

Insurance coverage for home kits can be expected to increase testing at home

- Analogous to free or low-cost home COVID testing
- Providing free home HIV test kits increases overall testing and HIV case detection in publicly-funded research programs (*JAMA Intern Med* 2020;180(1):117-125)
- People know when they have potentially been exposed and want to access testing
- Time and stigma are major barriers to making a clinic visit according to surveys (*MMWR* Sep 24, 2021, 70(38):1322-1325) and in my own experience as a provider
- Out-of-pocket cost (generally \$50 - \$300 per test) is currently a major barrier for people to use home kits