

## STI Express Services: Increasing Access and Testing while Maximizing Resources



### Introduction

The United States is experiencing steep and sustained increases in chlamydia, gonorrhea, and syphilis. The increases can be attributed to a number of factors, including increased transmission, higher rates of testing and diagnoses, and increased case ascertainment.<sup>1</sup> But they also reflect a strained public health system—one that was already overburdened prior to COVID-19 and is now unfathomably overwhelmed—that does not have the resources to adequately prevent, diagnose, and treat STIs, particularly among disproportionately impacted populations. STI clinics have responded to this situation in a variety of innovative ways, including by implementing express services, which refer to triage-based STI testing without full clinical examinations.

STI express services have been shown to increase clinic capacity, reduce time to treatment, reduce visit time, and decrease visit cost, and therefore have the potential to increase access and testing while maximizing available resources. During the COVID-19 pandemic, express services have also allowed for physically distant STI testing. NACCHO's STI Express Initiative aims to increase the capacity of STI clinics to offer express services that are responsive to patient, clinic, and community needs and advance STI and HIV prevention efforts. Through this Initiative, NACCHO has gained critical insight regarding the potential for express services to meet the needs of STI clinics and patients and identify barriers that must be addressed to support implementation and scale-up.

### Background

STI rates have reached record-high levels in the United States. Over 2.5 million cases of chlamydia, gonorrhea, and syphilis were reported in 2019, an all-time high after six consecutive years of increased cases.<sup>2</sup> Since 2015, total cases of chlamydia, gonorrhea, and syphilis have increased by 19%, 56%, and 74%, respectively; congenital syphilis has almost tripled over the same period.<sup>3</sup> STIs have significant public health consequences, including infertility, birth defects, chronic pain, and stigma. Additionally, untreated STIs lead to increased transmission of HIV and other STIs and contribute to the

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development of bacterial resistance.<sup>4</sup> STIs are most prevalent among adolescents, men who have sex with men (MSM), and women of reproductive age.<sup>5</sup> Across almost all groups, people of color are disproportionately burdened by STIs due to complex, intersecting factors such as poverty, stigma, racism, lack of access to health services, and mistrust of the health system.<sup>6</sup>

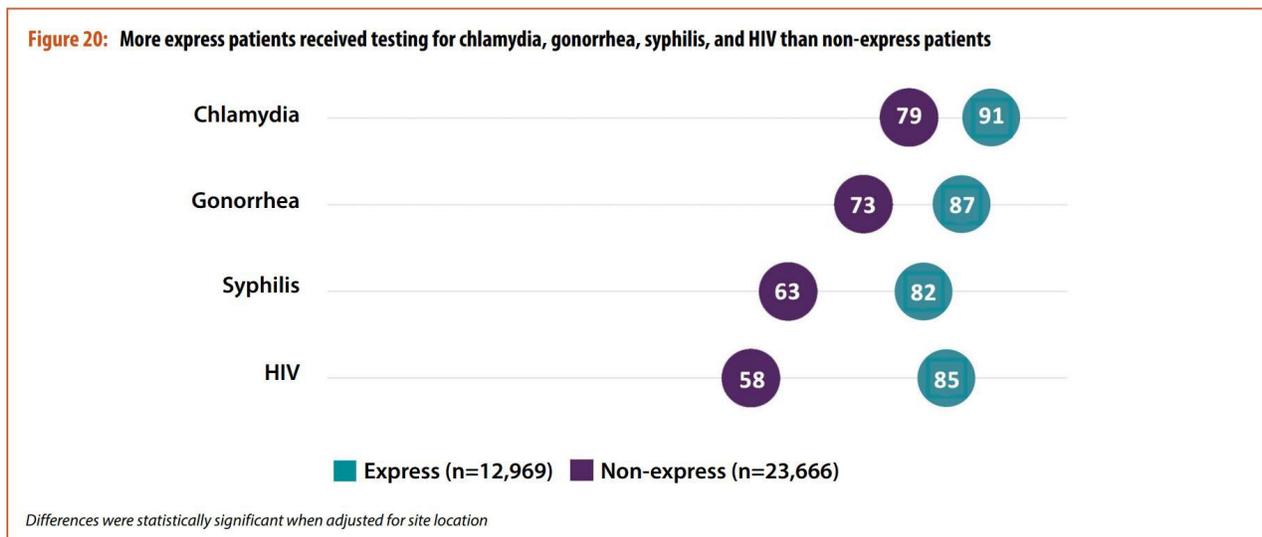
In addition to individual-level outcomes, STIs are also costly; it is estimated that STIs cost the U.S. approximately \$16 billion annually in direct medical costs.<sup>7</sup> This strain on the health care system is exacerbated by funding cuts to the public health system; as a result of decreased funding, STI specialty clinics have been forced to reduce hours, services, or even close.<sup>8</sup> In order to maximize limited resources while responding to historic rates of STIs and the COVID-19 pandemic, innovative approaches to STI testing and treatment are needed.

### STI Express Services

Express services have been implemented both domestically and globally to provide less resource-intensive services to patients at lower risk for STIs and other health care needs. In express services, asymptomatic patients are routed to less intensive clinical services. Clinics have reported a number of motivations for implementing express services, including reducing clinic clog, gaining staffing efficiency, reducing time to treatment, and increasing access to care. As COVID-19 has reduced critical services, including testing, treatment, and PrEP, and many clinics have prioritized symptomatic patients, there is an urgent need to rapidly increase access to STI services.<sup>9</sup> Creating more patient-centered experiences and decreasing stigma associated with STI testing are also key

motivating factors to considering alternative approaches to STI testing. Studies have identified a number of positive outcomes for express visits. A recent multi-site evaluation of STI express services in 13 clinics across seven jurisdictions found that express services are associated with an increase in the number of patients seen per day, higher rates of packaged STI and HIV testing, and are likely to attract new patients. Treatment for chlamydia and gonorrhea was provided an average of 6.6 and 6.1 days after the initial screening visit, respectively, and treatment rates were consistently high across sites; both statistics indicate that express patients are likely to receive treatment and within a reasonable timeframe. Moreover, while patient satisfaction was high among express and non-express patients, express patients reported higher satisfaction rates and were more likely to recommend testing at that clinic to a friend.<sup>10</sup>

Express testing also demonstrates potential for benefits at the population level. Several modeling studies have shown express testing models could lead to greater testing and early detection and treatment of STIs, ultimately leading to reduced transmission.<sup>11</sup> This assumption is strengthened through the multi-site evaluation, which found that express patients more frequently received STI testing at clinic visits as compared to non-express patients; the proportions of express patients who received testing for chlamydia (91%), gonorrhea (87%), syphilis (82%), and HIV (85%) at their most recent visit were higher than those for non-express patients (79%, 73%, 63%, 58%, respectively).<sup>12</sup>



Moreover, the high rates of HIV testing in STI clinics have the potential to play a critical role in ending the HIV epidemic, increasing the number of HIV diagnoses and more rapidly linking patients living with HIV to care. STI express patients are frequently offered PrEP counseling, and express services can help clinics maintain large populations on PrEP by enabling routine monitoring visits without additional burdens on clinicians.

Studies have also identified several potential drawbacks to the express model. Infections that require clinical exams for diagnosis, such as trichomonas and urethritis, could remain undiagnosed if symptoms are not reported, as the hallmark of an express visit is one without a clinical examination. For example, one study found 6.3% of women with asymptomatic trichomoniasis would have had a missed diagnosis if they had gone through an express model that did not include vaginal swabs with wet-mount microscopy.<sup>13</sup> Another identified missed opportunities for same day treatment of asymptomatic urethritis, and more data is needed to consider missed opportunities for same day treatment more generally.<sup>14</sup> One study noted the potential for patients familiar with the express option to “game the system” and withhold information that would make them ineligible for express services; this concern is bolstered by anecdotal evidence from sites participating in NACCHO’s STI Express Initiative.

It is important to note that express services are not a panacea. For example, though the multi-site evaluation found that express visits were significantly shorter than non-express visits, the express visit appointment time among participating sites ranged from 32–105 minutes.<sup>15</sup> Aside from the fact that an express visit of close to two hours might seem like a misnomer, it is important to consider how constraints such as the physical layout of a clinic, existing staffing pool, and state registration requirements, among others, will not be addressed through the provision of express services. Thus, clinics and jurisdictions looking to implement express services should consider how express services might be beneficial within the broader context of a clinic’s challenges and goals. NACCHO’s guide for clinics, [Implementing STI Express Services: Considerations and Lessons Learned](#), is a helpful resource to guide some of this decision-making.

Despite these concerns, STI express services have become commonplace. They are found across the country in a variety of settings, and many jurisdictions are considering how these services can be strengthened and leveraged to address crisis levels of STIs and support Ending the HIV Epidemic plans. It is important to continue to conduct studies and provide resources that support the quality improvement of express services and guide decision-making in a way that maximizes available resources. Each clinic or jurisdiction must assess for themselves whether the benefits outweigh the potential drawbacks and design an express model that minimizes the greatest concerns.<sup>16</sup>

## Insights, Conclusions, and Recommendations

In January 2018, NACCHO launched the STI Express Initiative, which aims to increase the capacity of STI clinics to offer express services that are responsive to patient, clinic, and community needs and advance STI prevention efforts. As part these efforts, NACCHO has worked with STI clinics across the country through communities of practice and in-depth projects to assess common motivations, challenges, and practices related to express services in order to synthesize express models and better understand their utilization. Moreover, a recent multi-site evaluation contributed much-needed data to research questions related to express patient demographics, testing and treatment, capacity, patient satisfaction, and cost. Through these activities, NACCHO has gained critical insight regarding the variety, utility, benefits, and feasibility of express services across the United States and offers three conclusions and three recommendations.

### Conclusions

*Express services offer benefits, but more research is needed.*

Evaluations conducted within and across clinics indicate that express services offer benefits to both patients and clinics. Express services are associated with higher rates of packaged testing, higher levels of patient satisfaction, and an increased number of patients that can be seen each day. Moreover, express services are more likely to result in newer patients accessing testing. However, more research is needed in the following areas:

- Accuracy of triage by different methods
- Eligibility of patients for express services within a given clinic or population
- The quality of PrEP counseling and health education offered during express services
- The successful referral of express patients to PrEP and other preventive services
- The likelihood that express patients will return to the clinic for treatment versus receiving treatment elsewhere

Ideally, these questions would be answered through another multi-site effort, but data comparison and analysis across sites is challenging due to differences in what data is collected, how data is stored, and inconsistencies and inflexibilities across EMRs.

*There is no one-size-fits-all approach to express*

Through this project, we have come to define express services as **triage-based STI testing without a full clinical examination**. 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 swabs, and technology and automation to conserve time and staffing**. Moreover, because there are no examinations, they allow for physically distant visits.

In considering whether or how to implement express services, it is important to remember that there is no one-size-fits-all approach to express. While express services are commonly associated with stand-alone clinics—such as Dean Street Express in London—in the United States, they are overwhelmingly integrated into existing clinics as distinct patient flows. Because they are offered as integrated services, they are defined by each clinic’s structure, flow, staffing, and resources. For example, triage might be accomplished via kiosks or face-to-face interviews with medical assistants (MAs). Clinics might be staffed with a number of physicians and nurse practitioners, or they might be nurse-driven and heavily reliant on health educators. Some clinics have invested in point-of-care (POC) testing that enables test results in 90 minutes, while others rely on public health labs for processing. Sophisticated clinics are not necessarily more express; rather, they are more resourced.

Due to resource constraints, most clinics interested in establishing express services are not going to be able to implement their full wish lists. Express services should be thought of as a strategy that can be deployed to address a specific set of needs within the confines of a particular health care setting.

*Express services should be part of jurisdiction-wide strategies to address historic levels of STIs and incorporated into Ending the HIV Epidemic plans.*

State and local STI and HIV programs should consider the potential for express services in meeting the needs of patients and clinics in their regions. Coordinating regional efforts to strengthen express services will allow sites to share best practices, meet regional or jurisdictional priorities, and inform STI prevention efforts. Additionally, express services should be considered as part of Ending the Epidemic (EtE) plans, whether jurisdictional or part of the federal Ending the HIV Epidemic initiative (EHE), as they could play a key role in increasing access to testing and linkage to prevention and treatment services.

Express services should be considered as part of STI clinics' toolkits to increase access to and utilization of STI testing during the COVID-19 pandemic and future public health emergencies.

During the first 12 months of the COVID-19 pandemic, STI clinics in the U.S. reported widespread clinic closures, staff reassignments, and decreases in demand for STI testing.<sup>17</sup> To mitigate these impacts, clinics have implemented multiple program adaptations such as appointment-only visits, limiting visits to symptomatic clients, and express STI services.<sup>18</sup> Findings from the STI Express Data Collaborative show that express services both attract new patients and allow clinics to maximize top-of-license strategies, which make these services a promising tool to restore both demand for STI testing as well as clinic capacity to see asymptomatic clients while staff continue to be assigned to COVID-19 services. Additionally, as express STI services commonly include self-collected testing, express services may increase client and provider comfort with testing while maintaining social distancing guidelines.

### Recommendations

- Consider the role of express services within your clinic, jurisdiction, and state, and support implementation where it's needed most.
- Identify your primary motivations in implementing express services, and prioritize resources and investments based on those motivations. Recognize which barriers can be addressed and which should be worked around.
- Balance the clinic's needs and desires with those of your patients in order to continue providing quality, patient-centered care. Conduct needs assessments and patient satisfaction surveys to understand how comfortable your patients would be with express services, and features such as self-collection and automation, and ensure that all patients are offered responsive care.

### Conclusion

STI clinics play a critical role in STI prevention and treatment and an increasingly important role in HIV prevention and linkage to other services that address co-occurring issues, such as behavioral health, substance use, and housing instability. The need to increase access to care and expand services is at odds with the limited funding to support these critical activities. Express services offer the potential to improve outcomes for both clinics and patients by expanding access while maximizing resources. Despite the fact that there is limited data regarding the effectiveness of express services, a number of clinics have already implemented them, and many more are considering it. Based on what NACCHO has learned so far, express services are a promising strategy that should be explored, and clinics should be supported in their efforts to establish, scale-up, and evaluate these services.

See [NACCHO's STI Express Initiative homepage](#) or email [hsvh@naccho.org](mailto:hsvh@naccho.org) to learn more about express services and how you can get involved.

### References

1. Centers for Disease Control and Prevention. *Sexually Transmitted Disease Surveillance 2019*. Atlanta: U.S. Department of Health and Human Services; 2021.
2. Centers for Disease Control and Prevention. *Sexually Transmitted Disease Surveillance 2019*. Atlanta: U.S. Department of Health and Human Services; 2021.
3. Centers for Disease Control and Prevention. *Sexually Transmitted Disease Surveillance 2019*. Atlanta: U.S. Department of Health and Human Services; 2021.
4. Ventola, C.L. The antibiotic resistance crisis part 1: causes and threats. *P.T.* 2015, 40(4): 277-283.
5. Centers for Disease Control and Prevention. *Sexually Transmitted Disease Surveillance 2017*. Atlanta: U.S. Department of Health and Human Services; 2018.
6. Centers for Disease Control and Prevention. *Sexually Transmitted Disease Surveillance 2019*. Atlanta: U.S. Department of Health and Human Services; 2021.
7. Chesson H, Spicknall I, Bingham A et al. The Estimated Direct Lifetime Medical Costs of Sexually Transmitted Infections Acquired in the United States in 2018. *Sexually Transmitted Diseases*, (2021), 215-221, 48(4). DOI: 10.1097/OLQ.0000000000001380
8. National Association of County and City Health Officials. Local health department job losses and program cuts: findings from the January 2012 survey. Washington DC: National
9. Kelley, K. (2020). LHD HIV, STI, and Hepatitis Programs Respond and Adapt to COVID-19. Essential Elements of Public Health. Retrieved from <https://www.naccho.org/blog/articles/lhd-hiv-sti-and-hepatitis-programs-respond-and-adapt-to-covid-19>.
10. Feder, M., Menstell, E., Winters, A., Nakatsukasa-Ono, W., & Berruti, A. (2021). *Evaluating Sexually Transmitted Infection Express Services: Findings from a Multi-Site Data Collaborative*. Cardea Services. Retrieved from <https://www.naccho.org/uploads/downloadableresources/sti-express-report.pdf>.
11. Whitlock, G.G., Gibbons, D.C., Longford, N., Harvey, M.J., McOwan, A., & Adams, E.J. (2018). Rapid testing and treatment for sexually transmitted infections improve patient care and yield public health benefits. *International Journal of STD & AIDS*, 29(5), 474-482. DOI: 10.1177/0956462417736431
12. Feder, M., Menstell, E., Winters, A., Nakatsukasa-Ono, W., & Berruti, A. (2021). *Evaluating Sexually Transmitted Infection Express Services: Findings from a Multi-Site Data Collaborative*. Cardea Services. Retrieved from <https://www.naccho.org/uploads/downloadableresources/sti-express-report.pdf>.

13. Xu, F., Stoner, B., Taylor, S.N., Mena, L., Martin, D.H., Powell, S., & Markowitz, L.E. (2013). "Testing only" visits: an assessment of missed diagnoses in clients attending sexually transmitted disease clinics. *Sexually Transmitted Diseases*, 40(1), 64-69. DOI: 10.1097/OLQ.0b013e31826f32f
14. Shamos, S.J., Mettenbrink, C.J., Subiadur, J.A., Mitchell, B.L., & Rietmeijer, C.A. (2008). Evaluation of a testing-only "express" visit option to enhance efficiency in a busy STI clinic. *Sexually Transmitted Diseases*, 35(12). DOI: 10.1097/OLQ.0b013e31815ed7b2
15. Feder, M., Menstell, E., Winters, A., Nakatsukasa-Ono, W., & Berruti, A. (2021). *Evaluating Sexually Transmitted Infection Express Services: Findings from a Multi-Site Data Collaborative*. Cardea Services. Retrieved from <https://www.naccho.org/uploads/downloadableresources/sti-express-report.pdf>.
16. Rietmeijer, C.A. (2013). The pros and cons of the express visit option. *Sexually Transmitted Diseases*, 40(1), 62-63. DOI: 10.1097/OLQ.0b013e31827e16ac
17. National Coalition of STD Directors. COVID-19 & The State of the STD Field: Phase III. Washington, 2021. Retrieved from <https://www.ncsddc.org/wp-content/uploads/2021/01/COVID19-State-of-STD-Field-Phase-III-Report-1.28.21-FINAL-1.pdf>.
18. National Coalition of STD Directors. COVID-19 & The State of the STD Field: Phase II. Washington, 2021. Retrieved from <https://www.ncsddc.org/wp-content/uploads/2020/08/STD-Field.Survey-Report.II.Final-8.6.20.pdf>.

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