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. But they also reflect a strained public health system 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. 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.

The State of STIs

STI rates have reached record-high levels in the United States. Over 2.4 million cases of chlamydia, gonorrhea, and syphilis were reported in 2019, an all-time high after five consecutive years of increased cases. Since 2014, total cases of chlamydia, gonorrhea, and syphilis have increased by 19 percent, 63 percent, and 71 percent, respectively; congenital syphilis has almost tripled over the same period. 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 development of bacterial resistance. STIs are most prevalent among adolescents, men who have sex with men (MSM), and women of reproductive age. 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.

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. This strain on the healthcare 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. To maximize limited resources while responding to historic rates of STIs, 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 healthcare 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. Creating more patient-centered experiences and decreasing stigma associated with STI testing are also key motivating factors to considering
alternative approaches to STI testing. Evaluations have identified a number of positive outcomes for express visits. In several clinics, implementation of express STI visits increased clinic capacity, which decreased the number of clients turned away from the clinic and increased the number of patients seen through both express and traditional provider visits.\(^9\) Several studies have found that routing asymptomatic patients to express visits reduced costs due to personnel savings, as the express model utilizes lower-paid employees.\(^{10,11}\) Moreover, express visits have also resulted in decreased visit time and reduced time to treatment.\(^{12,13}\) Finally, patients reported being satisfied with express services and indicated that they would utilize express services again.\(^{14}\)

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.\(^{15}\) One study looking at patient satisfaction and client feedback in an inner city setting found that heterosexual men and young adults under the age of 25 indicated they were less likely to come back to the STI clinic if there was not an express option. The same study found that most of the people surveyed, including young adults and MSM, thought they would get testing more frequently in the future if they had the option of an express visit.\(^{16}\)

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 percent 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.\(^{17}\) 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.\(^{18}\) 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. Finally, stakeholders have expressed concerns related to the lack of one-on-one time with a provider and the consequences of not receiving risk reduction counseling and other forms of health promotion. 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.\(^{19}\)

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 prevention efforts. As part these efforts, NACCHO is working with STI clinics across the country to assess common motivations, challenges, and practices related to express services in order to synthesize express models and better understand their utilization. Through these activities, NACCHO has gained critical insight regarding the variety, utility, and feasibility of express services across the United States and offers three conclusions and three recommendations.

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 prevention efforts
- Engages STI clinics across the country to assess common motivations, challenges, and practices related to express services in order to synthesize express models and better understand their utilization
Conclusions

There is no one-size-fits-all approach to express services. Five key features of express services alter the clinic design from a traditional STI model:

1. Implementation of triage
2. Staffing models that maximize top-of-license strategies
3. Patient self-collection of swabs
4. Technology and automation to conserve time and staffing
5. Opportunity to implement in diverse settings.

These features are not required for services to be considered express, but they are associated with express services as practices that maximize efficiency. Variation among express models is often a result of the way that these features are implemented. For example, triage might be accomplished via kiosks or face-to-face interviews with medical assistants. 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 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, the goal of clinics interested in establishing express services is unlikely to be the implementation of all of these features. Instead, the goal should be to consider motivations for express services, identify primary barriers to efficiency (e.g., clinic clog, staffing inefficiencies, test turnaround times), and prioritize investments and protocol changes that best address their challenges. Express services should be thought of as a strategy in which the clinic design is optimized for patient volume and top-of-license strategies within the confines of a particular healthcare setting.

Express services should be part of jurisdiction-wide strategies to address historic levels of STIs. State- and local-level 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 HIV/AIDS Epidemic (EtE) plans, as they could play a key role in increasing access to testing and linkage to prevention and treatment services.

Express services have great potential, but challenges remain. Clinics that have implemented express services have shared common barriers: inflexibility within electronic health records systems (EHRs); reliance on public health labs with long turnaround times; and limited billing opportunities for express visits. Clinics have responded to these challenges in a variety of ways.

Electronic health records systems

For many clinics, the EHR is the starting point for what is possible for express services. For example, if a clinic wants to use kiosks for intake and triage, they need to consider whether to integrate the risk assessment data into the EHR. Some clinics have decided to purchase or develop new programs that allow more flexibility with data collection and provide the option to not integrate risk assessment data into the EHR for confidentiality purposes, but this decision requires that an interface be built between the new data collection system and the EHR. Assuming that purchasing or constructing a new EHR is not an option, determining what data collection is possible within the current system is the recommended starting point for exploring express services, particularly in relation to intake and lab reporting.

Public Health Labs

Many clinics rely on public health labs to process STI tests due to lower costs compared to private labs. However, public health labs tend to have longer turnaround times and, therefore, prolonged time to notification of results and treatment. As point-of-care options for STIs are
currently limited and expensive, the public health lab remains the only option for many STI clinics. Clinics that utilize labs with longer turnaround times might prioritize efficiencies in clinic flow, such as visit time and wait time, until advancements in technology increase the availability of point-of-care tests.

**Revenue Generation**

Because express services do not involve a provider, there may be limited opportunities to bill for services. As a result, clinics will likely need to explore a variety of options to support express services. Potential options include: applying for Federally Qualified Health Center (FQHC) look-alike status, leveraging opportunities under the Family Planning Medicaid Waiver Section 1115 Demonstration, establishing a 340B drug-pricing program, and implementing a sliding fee scale or patient donations. Clinics could also consider not removing the provider entirely, but significantly limiting the time spent with the patient. Sites implementing express services should familiarize themselves with state licensing and delegation requirements to develop a staffing structure that balances top-of-license strategies with revenue generation. Finally, express services are often utilized to free up provider time for more complex services, such as family planning or symptomatic cases. Therefore, it is important to consider the utility of express services in increasing revenue generation for the clinic overall, rather than focusing specifically on the sustainability of express services.

**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.

**Key Takeaways**

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.


**References**


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