Evaluating Sexually Transmitted Infection Express Services

Findings from a Multi-Site Data Collaborative

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ACKNOWLEDGEMENTS

EXECUTIVE SUMMARY

Project Overview

With rising rates of sexually transmitted infections (STIs) and related health care costs, STI and other clinics across the U.S. urgently need to increase testing and treatment, while minimizing the impact on staff and systems. To address these needs, clinics have responded in a variety of innovative ways, including implementing STI express services.

STI express services refer to triage-based STI testing without a full clinical examination. Research shows that STI express services increase clinic capacity, reduce time to treatment, reduce visit time, and decrease visit cost. Therefore, express services have the potential to increase access and testing while maximizing available resources.

In April 2019, the National Association of County & City Health Officials (NACCHO) engaged seven sites and Cardea Services (Cardea), as the evaluation consultant, in a multi-jurisdiction data collaborative to:

1. Further establish the evidence base for express services
2. Support quality improvement of established express models.

Site Overview

Seven sites participated in the data collaborative:

- The Denver Metro Health Clinic, Denver, CO
- Howard Brown Health Center, Chicago, IL
- University of Rochester Center for Community Practice Monroe County STD Clinic, Rochester, NY
- The Metro Public Health Department of Nashville/Davidson County STD Clinic, Nashville, TN
- The New York City Department of Health and Mental Hygiene Bureau of Sexually Transmitted Infections, New York City, NY
- 17th Street Testing, Treatment and Care Clinic, Orange County, CA
- Public Health-Seattle and King County Sexual Health Clinic, Seattle, WA

STI clinics designed STI express models, based on several factors, including funding considerations/payment models, physical space constraints, staff capacity and satisfaction, and technological capacity.
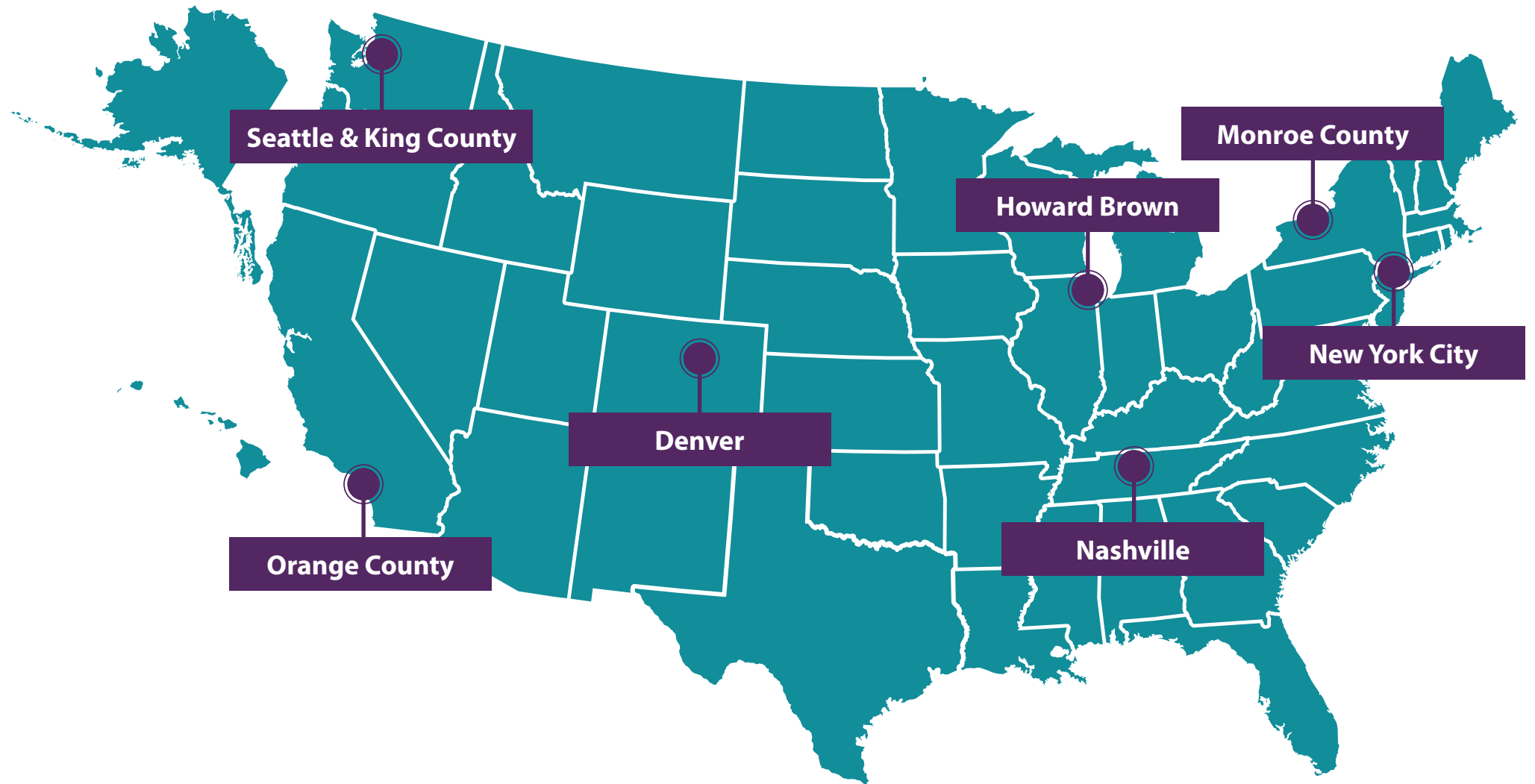
Methods

Data abstraction and analysis

Sites abstracted electronic medical record data among patients who received express and non-express services, and before and after express implementation. Cardea merged the datasets and assessed differences between express and non-express patients using most recent visit records.

Patient satisfaction surveys

Site staff distributed patient satisfaction surveys to those receiving express and non-express services from September through December 2019. Surveys were anonymous, paper-based, and offered in English and Spanish. The survey included Likert scale and open-ended questions.

Cost analysis

Sites reviewed facility records and worked with CDC to collect and record cost data during a six-month period between May 2018 and December 2019. CDC applied a "bottom up" or "ingredients-based approach," whereby each resource is identified and valued. CDC annualized all equipment costs with salvage value of 10% and useful life of five years.

Limitations

As with all multi-site evaluations, there were limitations, including those related to site differences. Sites used various data systems and methods for patient registration and collected and shared different patient data, depending on what was most relevant for their clinics and/or data sharing restrictions. Sites also provided varying amounts of patient data, depending on the number of patients they served during the project time period. These differences made it challenging to align and assess findings across sites. Additional limitations included historical and self-report biases, differences in how sites defined "express" and "non-express," and availability, quality, and utility of cost data.

Results

Patient characteristics	Capacity & Time	STI testing and treatment	Patient satisfaction	Cost

Express patients were younger; more frequently people of color, male, and heterosexual; and less frequently insured, engaging in transactional sex, or using high-risk or injection drugs, compared to non-express patients. Express services attracted a higher proportion of new patients than non-express services. On average, patients received 1 express visit within the 6-month time period for data collection.

Express services increased clinic capacity to see patients. Sites had more visits per day in the express time period than in the pre-express time period. In the express time period, sites had more non-express visits per day than express visits, allowing for more symptomatic patients to receive non-express services. On average, the majority of patients who were eligible for express services received these services. Express visits were significantly shorter than non-express visits, further allowing the clinic to see more patients per day.

Express patients received STI testing more frequently than non-express patients. Positivity for chlamydia, gonorrhea, syphilis, and HIV was lower among express patients than among non-express patients, with differences by race, ethnicity, LGBTQ+ status, and age. Treatment provision was lower among express than non-express patients. However, there was a less than one-week difference between testing and treatment between express and non-express patients. Express patients were less frequently on pre-exposure prophylaxis (PrEP), but more frequently provided with PrEP counseling, than non-express patients.

Nearly all express and non-express patients were satisfied with their visits, including with clinic staff, wait time, services and information received, and clinic environment. High quality care, being treated with respect, confidentiality, wait time, and cost were the top patient considerations when choosing a clinic to receive testing. Offering longer hours was the top suggestion for improving patient services.

The estimated annual median cost across express STI sites was $666,033. Most of the costs were allocated to personnel (70%), followed by laboratory expenses (12%). The estimated cost per express visit was $260, and the estimated cost per case diagnosed was $3,230.

Lessons Learned

STI express services complement other clinical services and may be implemented across diverse settings and via multiple strategies

Sites that offer STI express services use a variety of data systems and measures

STI express services offer increased opportunities for STI testing and PrEP consultation

Personnel costs are the main driver of total cost of express services
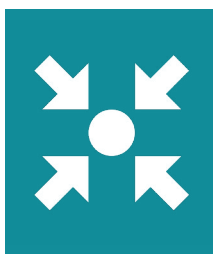
Sites implement STI express services for a variety of reasons

Considerations & Future Directions

Explore strategies to reach patients from priority populations

Strive to reduce appointment and wait time

Increase efforts to support STI treatment, PrEP, and Expedited Partner Therapy (EPT) provision
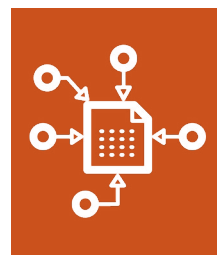
Harmonize data collection

If capacity allows, increase the number of visits to reduce the per visit cost

PROJECT OVERVIEW

With rising rates of sexually transmitted infections (STIs) and related health care costs, STI and other clinics across the U.S. urgently need to increase testing and treatment, while minimizing the impact on staff and systems. To address these needs, clinics have responded in a variety of innovative ways, including implementing STI express services.

What are express services?

STI express services refer to triage-based STI testing without a full clinical examination. Research shows that STI express services **increase clinic capacity, reduce time to treatment, reduce visit time, and decrease visit cost**. Therefore, express services have the potential to increase access and testing while maximizing available resources.

There is no one-size-fits-all approach to express services.

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.

In April 2019, the National Association of County & City Health Officials (NACCHO) engaged seven sites and Cardea Services (Cardea), as the evaluation consultant, in a multi-site data collaborative to:

1. Further establish the evidence base for express services
2. Support quality improvement of established express models.

In tandem, CDC conducted an analysis of the cost of STI express services.

The Data Collaborative focused its efforts in evaluating express services related to:

| Patient characteristics | Capacity & Time | STI testing and treatment |
| Patient satisfaction | Cost | |

SITE OVERVIEW

The sites that participated in this study were:

- The Denver Metro Health Clinic, *Denver, CO* (Denver)
- Howard Brown Health Center, *Chicago, IL* (Howard Brown)
- University of Rochester Center for Community Practice Monroe County STD Clinic, *Rochester, NY* (Monroe County)
- The Metro Public Health Department of Nashville/Davidson County STD Clinic, *Nashville, TN* (Nashville)
- The New York City Department of Health and Mental Hygiene Bureau of Sexually Transmitted Infections, *New York City, NY* (New York City)
- 17th Street Testing, Treatment and Care Clinic, *Orange County, CA* (Orange County)
- Public Health-Seattle and King County Sexual Health Clinic, *Seattle, WA* (Seattle & King County)

STI clinics designed STI express models, based on several factors, including funding considerations/payment models, physical space constraints, staff capacity and satisfaction, and technological capacity. When designing STI express models, sites focused on various ways to reduce patient barriers. For some sites, implementing walk-in express visits and using a check-in kiosk for triage reduced the number of patients turned away and increased provider capacity to see patients. Other sites had to consider limited funding and physical space constraints, including spaces that were too small to accommodate patient volume and the need for more exam rooms. In other sites, the layout of the space influenced patient flow. These factors influenced how sites designed STI express models.

Seattle & King County

Monroe County

Howard Brown

New York City

Denver

Nashville

Orange County
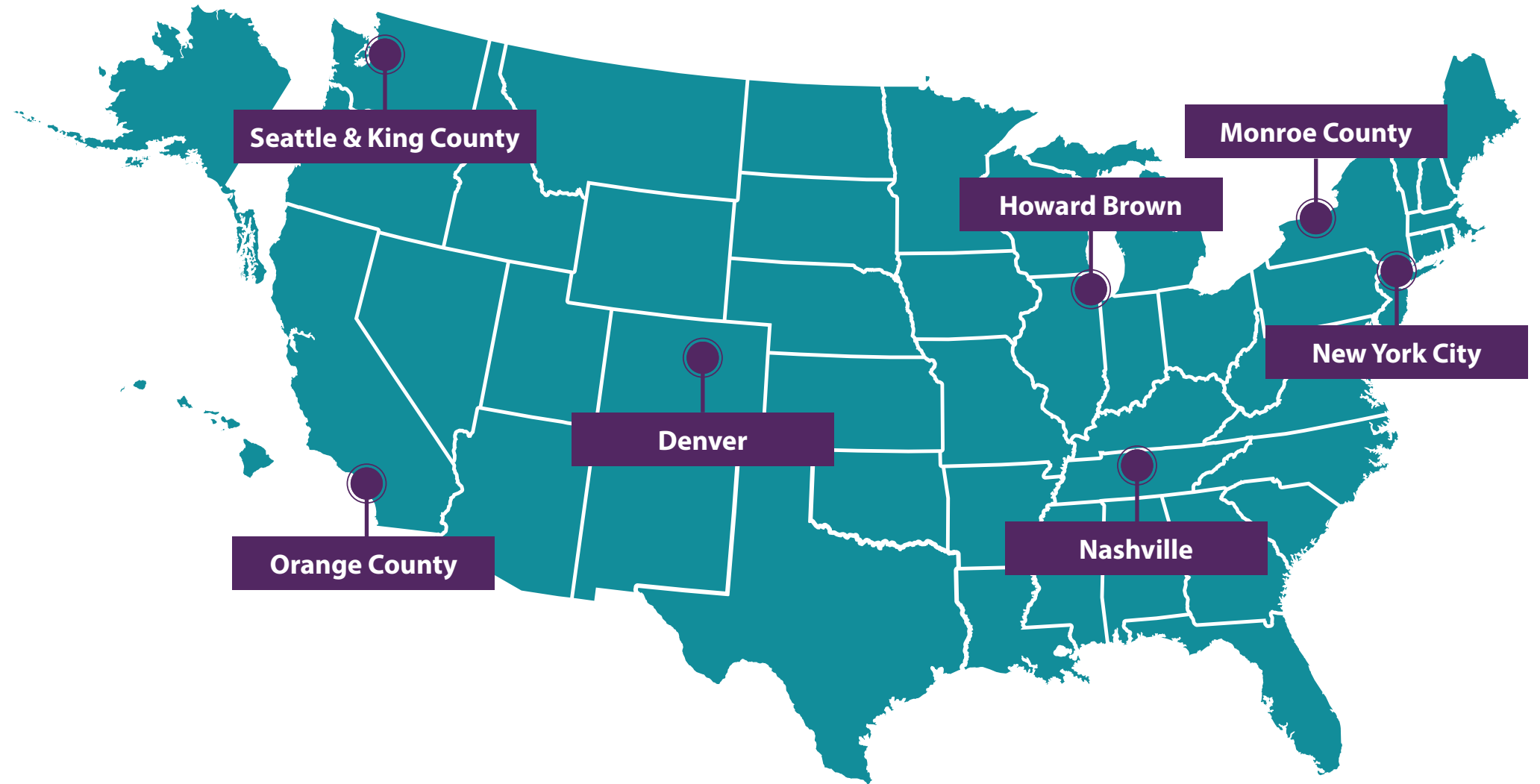
STI clinics adjust their service provision and clinic design based on a number of factors, including funding, testing technologies, and complementary services. Most participating sites had multiple iterations of express services in which eligible patients and processes differed over time. Among participating sites, Denver Metro Health Clinic was the first site to initiate express services in 2003. The New York City Department of Health and Mental Hygiene Sexual Health Clinics, Public Health-Seattle & King County Sexual Health Clinic, and University of Rochester Center for Community Practice/Monroe County STD Clinic services initiated express services in 2006, 2010, and 2014, respectively. Denver and New York City implemented their current models in 2016. Metro Public Health Department of Nashville/Davidson County started offering express services in 2017. 17th Street Testing, Treatment and Care Clinic in Orange County initiated express services, and Seattle & King County and Monroe County implemented their current models in 2017. Howard Brown Health Center in Chicago initiated express services in 2019.

| Denver, 1st iteration | | New York City, 1st iteration | | Seattle & King County, 1st iteration | | Monroe County, 1st iteration | | Nashville | Howard Brown |

| 2003 | 2004 | 2005 | 2006 | 2007 | 2008 | 2009 | 2010 | 2011 | 2013 | 2014 | 2015 | 2016 | 2017 | 2018 | 2019 |

Denver, New York City, current iteration

Seattle & King County, Orange County, Monroe County, current iteration
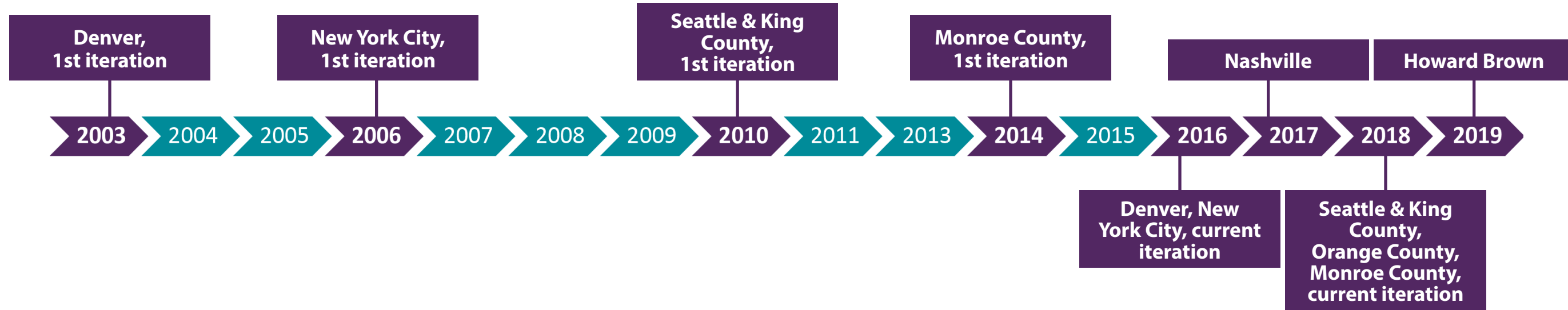
Sites have a range of 8,690 to 87,329 visits, including express and non-express visits, per year

Site	Visits
Orange County	8,690
Monroe County	9,379
Seattle & King County	11,439
Denver	14,000
Nashville	16,000
Howard Brown	23,000
New York City*	87,329

*Data from New York City includes seven clinic locations
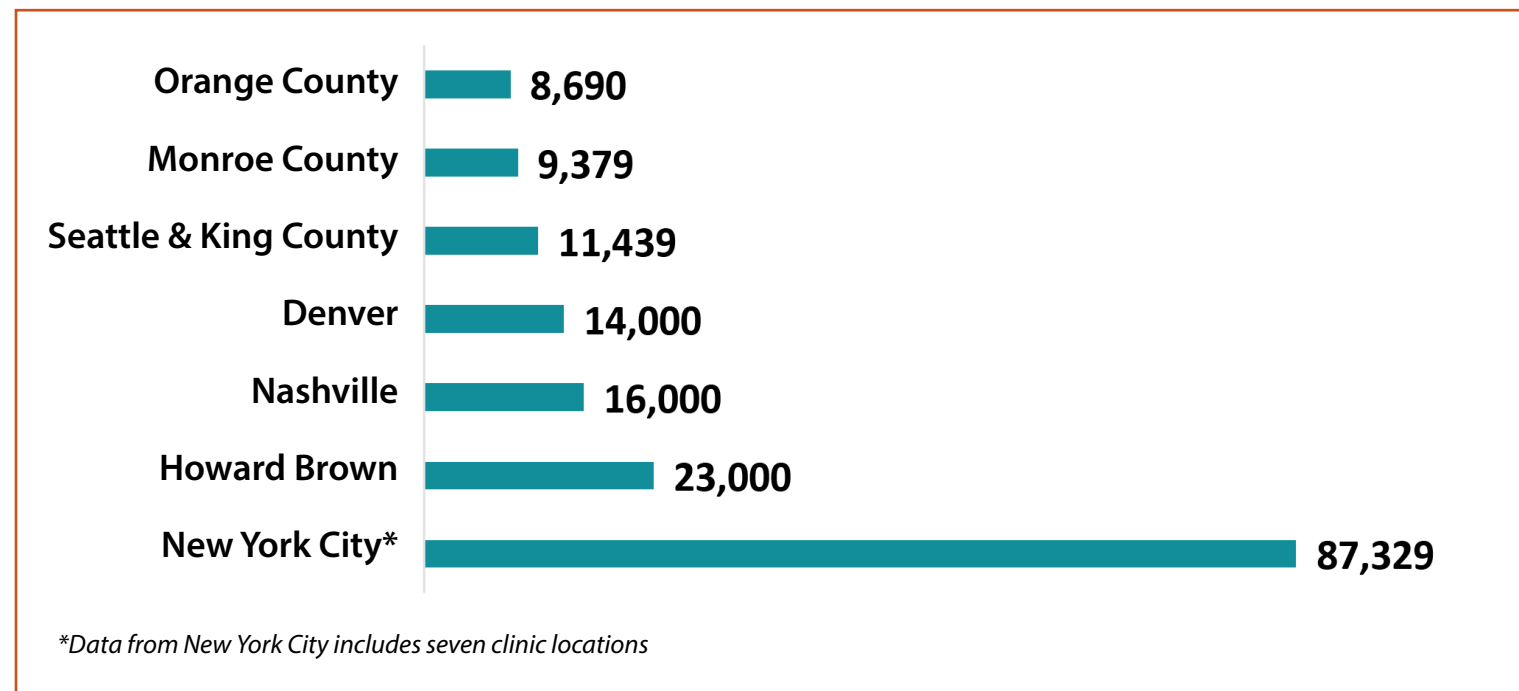
Sites provided data over six-month time periods between July 2018 and December 2019

For six of the sites, two comparison groups were included in the express time period: 1) express and 2) non-express visits. Seattle & King County had an additional comparison group called "express plus" (screening plus). Patients were triaged to an "express plus" visit, if they met the express visit eligibility criteria and were referred to one or more of the following: long acting reversible contraceptive counseling, HIV out of care, pre-exposure prophylaxis (PrEP), human papillomavirus vaccine, Pap smear, and/or hepatitis C virus treatment.

Monroe County Express
February – July 2019

Denver Express
New York City Express
July – December 2018

Nashville Express
Seattle & King County Express
January – June 2019

Howard Brown Express
Orange County Express
July 2019 – December 2019

2016   2018   2019   2020

Nashville
Pre-express
January – June 2016

Seattle & King County
Pre-express

Orange County
Pre-express
January – June 2018

Howard Brown
Pre-express
July – December 2018

Four sites provided data from a six-month time period before express services implementation (pre-express)

Pre-express data allowed for comparison of patient demographics and clinic capacity before and after implementation of express services, to assess if express services increased access for priority populations and increased clinic capacity. Only four sites included pre-express implementation data. The other sites implemented express services before 2016, and using that data would result in an increased time period bias.

Participating sites identified priority populations based on epidemiological data and their current patient population. Most sites prioritized young adults, men who have sex with men (MSM), and African American/Black patients. Some sites also prioritized patients who were Latinx, transgender persons, women of reproductive age, uninsured, low income, immigrants and refugees, persons experiencing homelessness, and who report substance use.

	Denver	Howard Brown	Monroe County	Nashville	New York City	Orange County	Seattle & King County
Young adults	■	■	■	■	■	■	
Men who have sex with men	■	■	■		■	■	■
African American/Black	■	■	■	■	■		
Latinx	■				■	■	
Transgender persons		■				■	■
Women of reproductive age	■		■		■		
Uninsured			■				
Low income				■			
Immigrants and refugees				■			
Persons experiencing homelessness						■	
Persons who use substances						■	

Consistent with the definition of express services, all sites provided express services to asymptomatic patients. In addition, five sites required that patients had no recent exposure to an STI, and two sites required that patients had no interest in PrEP/PEP and were not a priority population.

Patients were eligible for express services if they:

	Denver	Howard Brown	Monroe County	Nashville	New York City	Orange County	Seattle & King County
Were asymptomatic	■	■	■	■	■	■	■
Had no recent exposure to an STI		■	■	■	■		■
Had no interest in initiating PrEP/PEP		■	■				
Were not a priority population			■				■

Examples of STI Express Models

Model 1: The figure below describes one STI express model that a participating site implemented.
In this model, patients are triaged at registration. Note that here, new patients are not eligible for express services. Patients are also not provided counseling or any test results at their visit.

Front Office	Nurse Practitioner (NP)	Medical Assistant (MA)

- Patient Requesting Services
- Established Patient? — NO → STOP Patient not eligible for Quick Check; must be seen by a provider
- YES
- Does patient have symptoms? — YES
- NO
- Give patient CAQ, schedule patient for Quick Check appointment
- Check patient in
- NP calls patient and updates ambulatory organizer
- NP take the CAQ and gives patient Quick Check instructions and shows patient bathroom and/or self collection room(s)
- Patient instructed to return self-collected swabs to nurses station
- NP enters STD orders in EHR based on patient report
- Patient advised to return to internal waiting room
- MA calls patient back for blood draw
- Confirms contact information and explains "No news is good news."
- MA checks patient out

Model 2: The figure below shows a second STI express model that a participating site implemented.
This model utilizes kiosks to conduct triage through a computer-assisted self-interview (CASI) risk assessment. Algorithms route patients to three tracks: screening only, screening plus, and clinician visits. Screening plus visits allow for situational triaging by the nursing team. Patients who might need contraception, linkage to HIV care, Pap smear, HPV vaccine, or who would benefit from PrEP can see clinicians based on availability, but at a minimum will receive STI testing. The clinic flow for screening only visits is below.

- Patient arrives and checks in at registration desk
- A nurse triages patient to **full testing** or **fast track** visit
- **Fast Track Visit Criteria:**
  - Asymptomatic Clients
  - Asympt. Contacts
  - Treatment Only
  - Immigration Testing
  - Pregnancy Test Only
- **Full Testing Visit Criteria:**
  - Symptomatic
  - Clients
  - High Risk (Exposure Based)
  - Opt-In
- Fast Track PHN provides services: history, blood, urine, rapid HIV, HIV results, education, treatment (if applicable)
- Full Visit PHN provides services: history, physical exam, blood, swab, urine, rapid HIV, education, HIV results, presumptive treatment
- Fast track patient self-collects swabs for gonorrhea and chlamydia testing
- Patient receives results from stat lab the same day of visit, and calls back after five days for urine/blood results
- Patient calls to receive results five days after visit for urine, blood, and swab specimens

METHODS

As a Data Collaborative, we sought to learn about…

Patient characteristics

1. What are the characteristics of patients receiving express services?

2. How are express service patients the same or different from non-express patients?

3. Do express services attract new patients to the clinic?

4. Are new patients from priority populations?

Capacity & Time

1. What effect do express services have on a clinic's capacity to see patients?

2. What effect do express services have on clinic efficiency?

Testing & Treatment

1. What are positivity rates of express patients compared to non-express patients?

2. What effect do express services have on time to treatment initiation?

3. What effect do express services have on rates of return for treatment?

4. What effect do express services have on PrEP uptake?

How we answered these questions

STI clinic data abstraction and analysis

Cardea used data from various systems to access visit- and patient-level data at participating sites, during six-month periods from July 2018 to December 2019. Cardea assessed patient-level data using most recent visit records.

To examine whether associations existed between receipt of express services and patient characteristics, clinic capacity, time, testing, and treatment outcomes of interest, Cardea used chi-square tests, t-tests, and Fisher's exact tests, at $\alpha \leq 0.05$.

To explore the direction and magnitude of the associations between receipt of express services and categorical outcomes, Cardea used binomial and multinomial logistic regressions to obtain crude and adjusted odds ratios and 95% confidence intervals.

To explore the direction and magnitude of the associations between receipt of express services and continuous outcomes, Cardea used simple and multiple linear regressions to obtain Betas (β), R2, and 95% confidence intervals.

For one site, Orange County, new patients were not eligible for express services, so they received non-express services. For this reason, Cardea excluded Orange County data when analyzing the proportion of new patients who received express services.

Two sites, Denver and Seattle & King County, participated in a time study during the project time period to better understand the time it takes between each step in an express and non-express visit. Denver collected time data over two days, and Seattle & King County collected data over one week. Observers marked the time that patients reached specific visit steps, including the time a patient entered the clinic, was called from the waiting room, began and completed phlebotomy, was roomed, and left the clinic. Cardea subtracted differences between each respective time point and calculated the medians and standard deviations for each of these differences to assess the average time it took patients to move through each visit step.

Three sites—Denver, Orange County, and Monroe County—collected patient turn away data by recording each time the clinic was unable to see a patient who presented to the clinic on a given day. Cardea calculated the mean number of patients turned away per day across these sites to better understand how express services influence the number of patients who are turned away from care. These numbers represent raw, non-unique patients, because sites did not record this indicator in their data systems or collect unique identifiers for patients they did not see.

Note: Data systems and data collection

Sites used various data systems including Centricity, Cerner, Epic, Insight, and PTBMIS. They also used different methods for patient registration, including paper and electronic registration systems, including Epic, HealthVana, Insight, Matrix/Televox, and RedCap, and collected varying patient data, depending on what was most relevant and important for their clinics. These differences made it challenging to align and assess findings across sites. To aggregate multi-site data, Cardea collapsed data categories from some sites and combined similar, but not identical, indicators.

Some of the data that Cardea received from sites were incomplete or complex. Since the data systems sites used are not typically designed for program evaluation or research, it can be challenging to extract data in a clean, efficient, and useful way. For instance, most sites were not able to abstract whether a visit was a follow-up visit. To address this challenge, the Collaborative defined follow-up visits as visits that occurred within 14 days of a previous visit in which testing occurred. Sites also experienced challenges collecting accurate time stamps in databases. This may have led to incorrect time data, making appointments seem longer than they actually were. Finally, Cardea experienced challenges measuring the number of patients who were turned away from visits, since unique identification numbers were not collected for these patients.

Note: Merging data across sites

Cardea merged data across six sites that were able to provide visit-level data. All sites collected and shared a set of core variables (i.e., testing, positivity, and treatment for chlamydia and gonorrhea), and some sites collected and shared a set of optional variables (i.e., PrEP, EPT, types of sexual exposure). Some sites were not able to provide data on HIV or syphilis, due to data sharing restrictions.

As a Data Collaborative, we sought to learn about…

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Patient satisfaction

1. What factors do patients consider when choosing a clinic to receive testing?

2. To what extent are patients satisfied with express services?

3. To what extent are patients comfortable with the staff and clinic environment?

4. What can be improved about express visits?

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Cost

1. What are the outcomes, barriers, opportunities, and costs associated with establishing and maintaining express services?

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How we answered these questions

Patient satisfaction surveys

Site staff distributed patient satisfaction surveys to those receiving express or non-express services from September through December 2019. Surveys were anonymous, paper-based, and offered in English and Spanish. The survey included "select one," "select multiple," Likert scale, and open-ended questions. For the satisfaction indicators that relied on a 5-point Likert scale, Cardea collapsed responses into a binary measure for analysis (agree versus no opinion/disagree).

To examine whether associations existed between receipt of express services and patient satisfaction indicators, Cardea used chi-square tests and Fisher's exact tests, at $\alpha \leq 0.05$. To explore the direction and magnitude of associations between receipt of express services and patient satisfaction indicators, Cardea used binomial logistic regression to obtain crude and adjusted odds ratios and 95% confidence intervals.

To understand the likelihood of patients recommending the site to a friend on a scale from 1 (not at all likely) to 10 (extremely likely), Cardea calculated a net promoter score. "Promoters," included individuals who selected a 9 or 10 on the scale, "detractors" included individuals who selected 6 or lower, and "neutral" respondents were individuals who selected a 7 or 8. Cardea subtracted the proportion of detractors from the proportion of promoters to obtain the net promoter score.

Cardea analyzed qualitative data about ways that sites could improve using conventional content analysis, based on a codebook. The team generated initial themes from related survey questions and refined them based on emergent themes in the data. The team then synthesized the data to elucidate common themes.

Cost analysis

To assess the cost of express services, sites completed a Microsoft Excel template developed by CDC that included sections for personnel, laboratory, building and utilities, and other costs. Sites reviewed facility records and worked with CDC via site visits, phone, and email exchanges to collect and record cost data during a six-month period between May 2018 and December 2019. After completing data collection, CDC applied a "bottom up" or "ingredients-based approach," whereby each resource was identified and valued. CDC annualized all equipment costs with salvage value of 10% and useful life of five years. CDC estimated building space costs according to publicly available commercial office listing price information.

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For the purposes of this report

• All percentages are rounded to the nearest percent

• All adjusted analyses are adjusted for site location

– "Adjusting for site location" is a way to remove the portion of the difference between express and non-express services that is a result of patient location. Including site location in the models helped in assessing any differences that remain between express and non-express patients, if site location was held constant for all patients.

• All analyses were conducted using SPSS version 19.0

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PATIENT CHARACTERISTICS

Are patients in the express time period different from those in the pre-express time period?

This section of the findings compares patient demographics in the time period before express was implemented (pre-express time period) with the time period in which express was implemented (express time period). The express time period data includes all visit types—express, non-express, and other. Four sites provided pre-express time period data.

> There were larger proportions of patients in the express time period who were older, white, male, gay, insured, and reported using high risk substances (methamphetamine, heroin, and cocaine). There were smaller proportions of patients in the express time period who engaged in transactional sex and injection drug use, compared with those in the pre-express time period

Figure 1: Patients in the pre-express time period were younger than those in the express time period

Express time period (n=10,397): 47% | 53%

Pre-express time period (n=10,720): 53% | 47%

■ 29 years or younger ■ 30 years or older

Differences were statistically significant when adjusted for site location
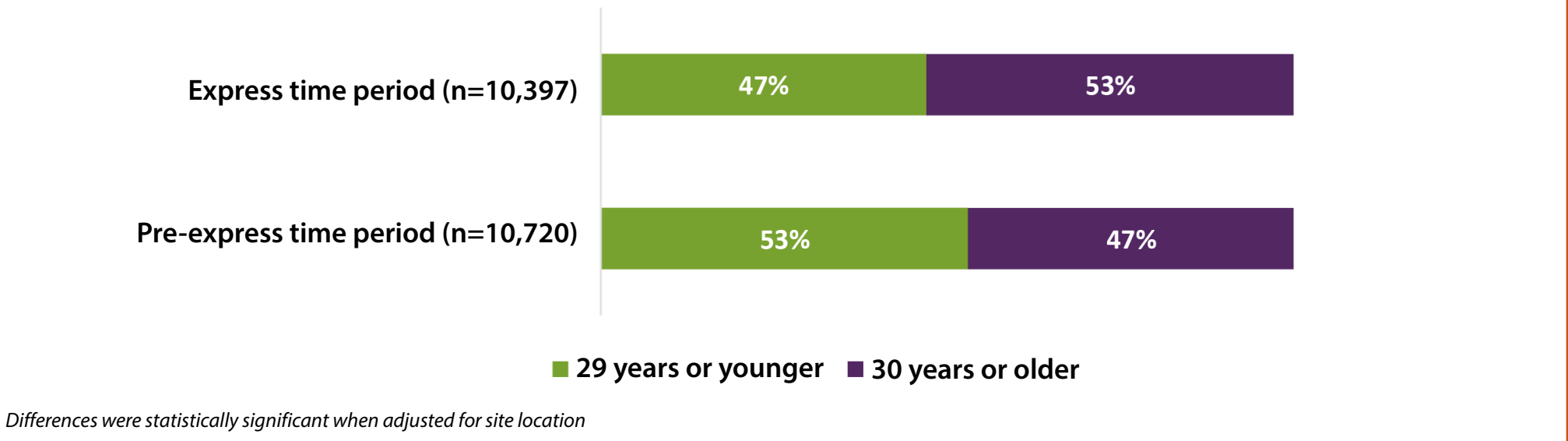
Figure 2: The majority of patients in the express time period were white, and the majority of those in the pre-express time period were African American/Black

Express time period (n=9,734): 50% | 35% | 8% | 5%

Pre-express time period (n=10,178): 44% | 48% | 4% | 2%

■ White ■ African American/Black ■ Asian/Pacific Islander
■ Other ■ Multiracial ■ American Indian/Alaska Native

Differences in race were statistically significant for other racial group when adjusted for site location
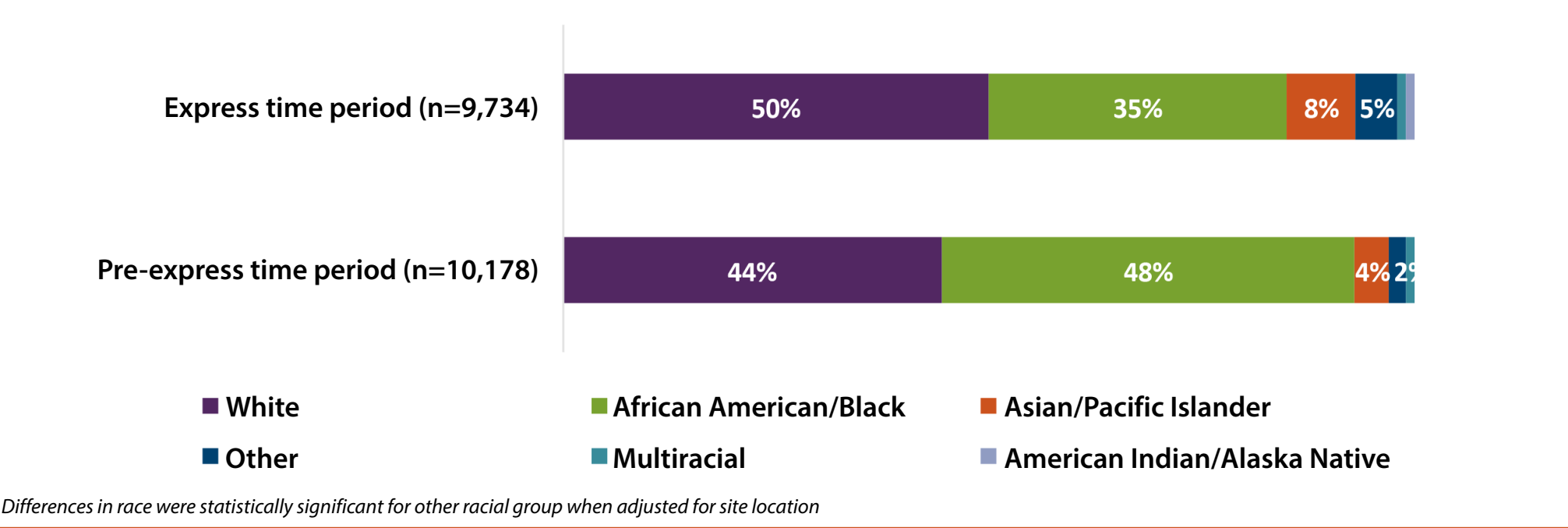
A greater proportion of patients in the pre-express time period were 29 years or younger (53%), compared to those in the express time period (47%). Patients in the express time period had a significantly lower odds of being 29 years or younger than those in the pre-express time period, when adjusted for site location (aOR: 0.77, 95% CI = 0.73-0.81; p<0.001).

Less than half of patients in the express time period (35%) and pre-express time period (48%) were African American/Black, and half of patients in the express time period and 44% of those in the pre-express time period were white. Less than 10% of all patients were Asian and Native Hawaiian/Other Pacific Islander, American Indian/Alaska Native, or multiracial, or another racial group. When adjusted for site location, patients in the express time period had higher odds of identifying as another racial group (Other), compared to those in the pre-express time period (aOR: 1.69, 95% CI:1.42-2.03, p<0.001). No other differences were significant when comparing patients in the pre-express and express time periods.

Figure 3: Less than a third of patients in the express and pre-express time periods were Hispanic/Latinx
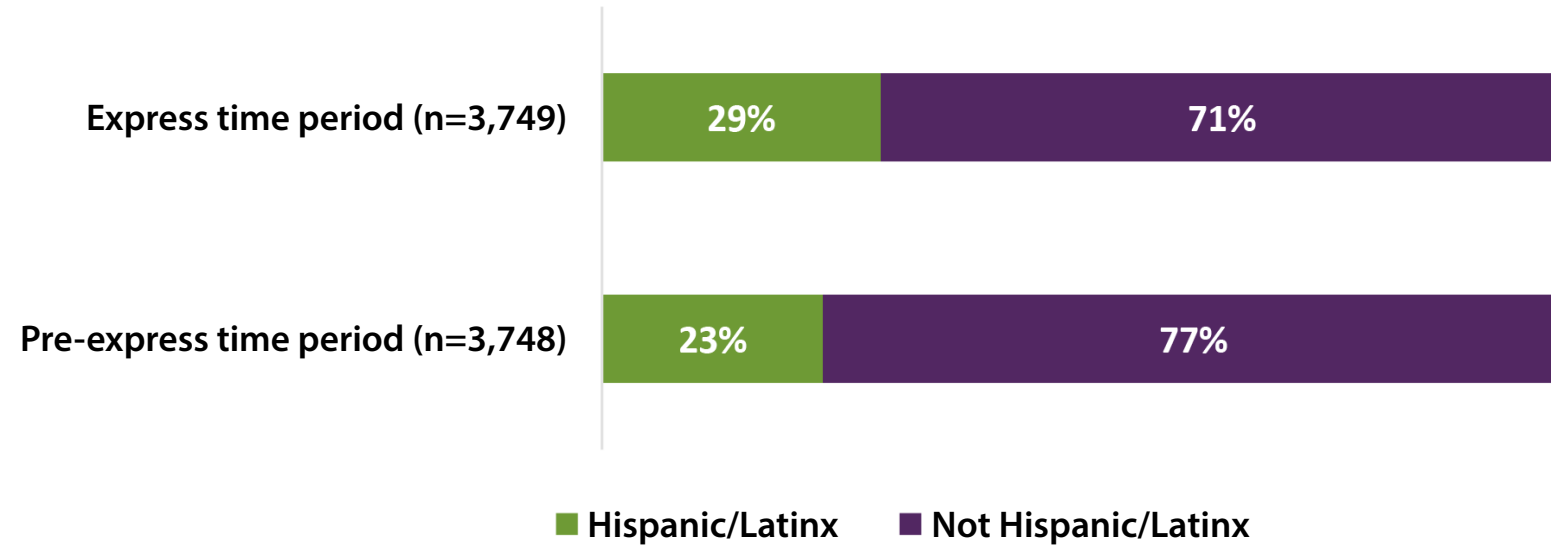
More patients in the express time period identified as Hispanic/Latinx (29%), compared to those in the pre-express time period (23%). The difference in ethnicity was not significant.

Express time period (n=3,749)
29% | 71%

Pre-express time period (n=3,748)
23% | 77%

■ Hispanic/Latinx ■ Not Hispanic/Latinx

Differences were not statistically significant when adjusted for site location

A higher proportion of males received services in the express time period (70%) than in the pre-express time period (65%). A lower proportion of females received services in the express time period (26%) than in the pre-express time period (34%). A larger proportion of patients in the express time period identified as non-binary/genderqueer/gender non-confirming (1%) and transgender persons (4%) than in the pre-express time period. When adjusted for site location, patients in the express time period had significantly lower odds than those in the non-express time period of identifying as female, compared to male (aOR: 0.93, 95% CI: 0.87-0.99, p=0.038). No other differences in gender identity were significant when comparing the pre-express and express time periods.

Figure 4: More patients identified as male in the express time period than in the pre-express time period

Express time period (n=10,082)
70% | 26% | 4% | 1%

Pre-express time period (n=10,225)
65% | 34% | 1%

■ Male ■ Female ■ Transgender persons ■ Gender diverse persons
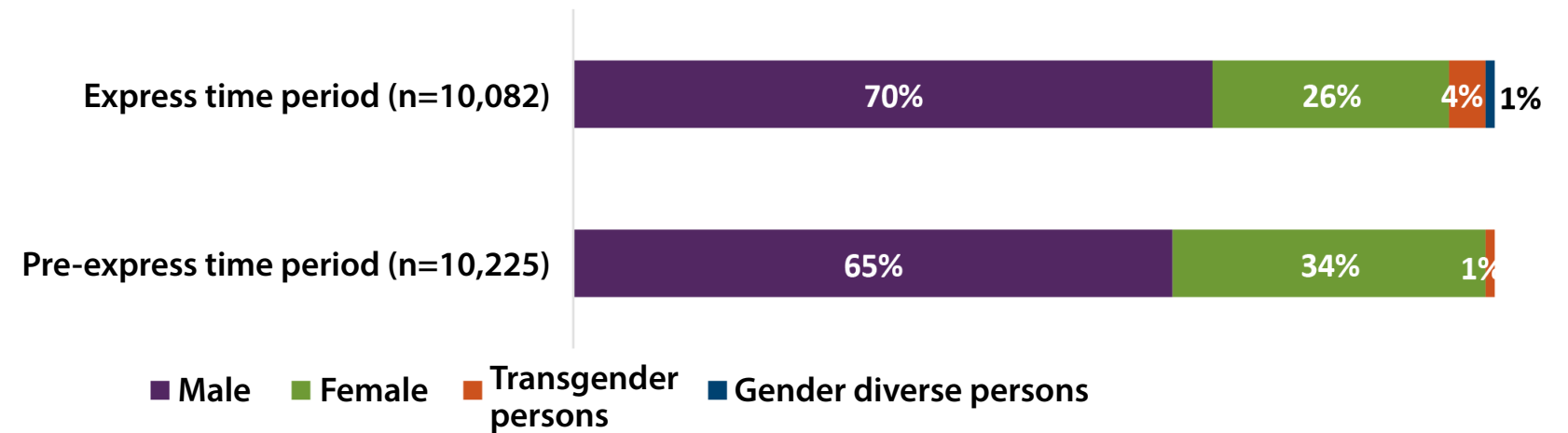
Differences in gender were statistically significant for females when adjusted for site location

Figure 5: More patients in the express time period identified as gay, queer, or pansexual than in the pre-express time period

- Straight/Heterosexual: Express 40%, Pre-express 48%
- Gay: Express 39%, Pre-express 35%
- Bisexual: Express 11%, Pre-express 11%
- Queer: Express 6%, Pre-express 4%
- Pansexual: Express 2%, Pre-express 0%
- Lesbian: Express 1%, Pre-express 1%
- Other: Express 1%, Pre-express 1%

■ Express time period (n=4,492)   ■ Pre-express time period (n=2,711)
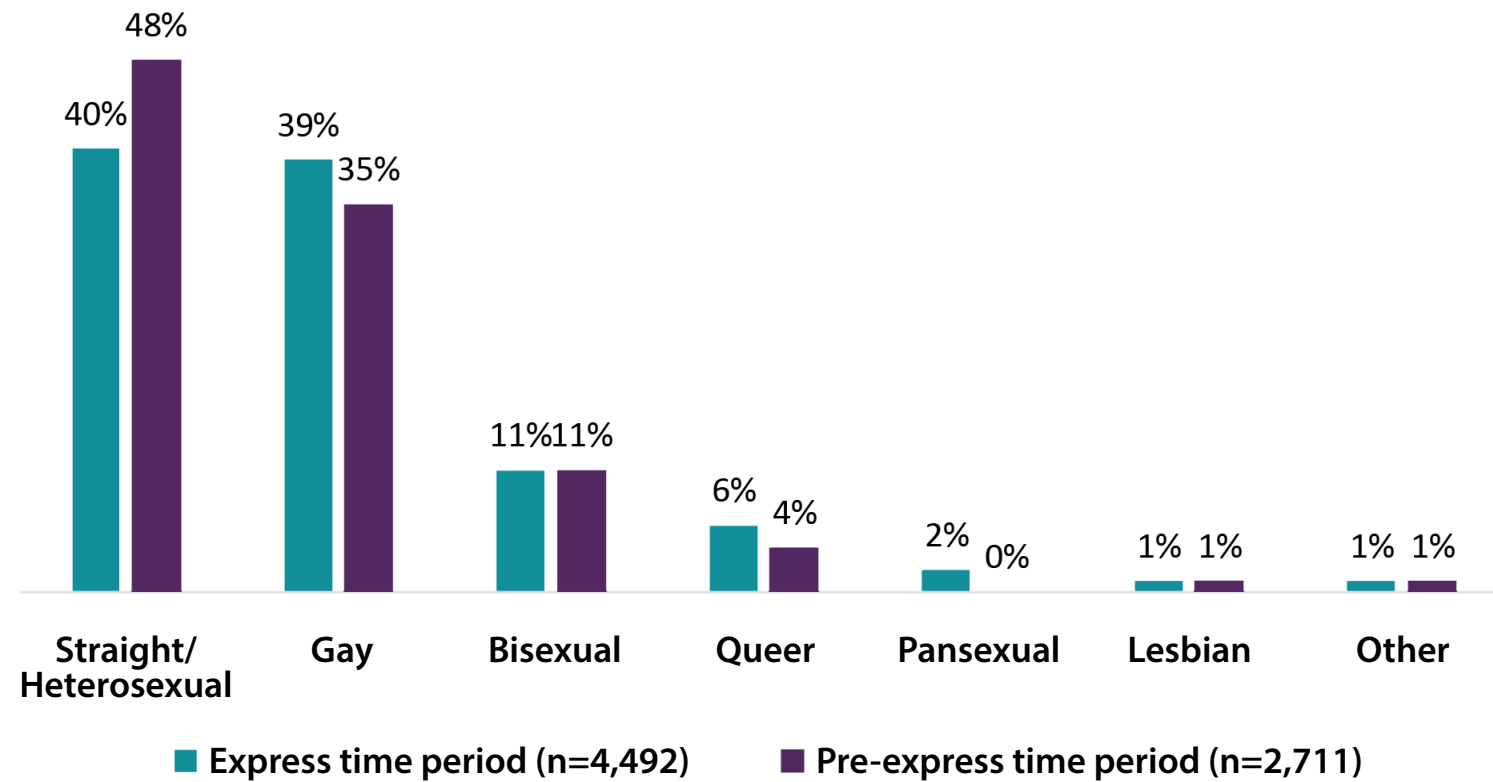
Differences in sexual orientation were statistically significant for gay, bisexual, and queer when adjusted for site location

Fewer patients who identified as straight/heterosexual received services in the express (40%), compared to the pre-express (48%) time period. A higher proportion of individuals identifying as gay (39%), queer (6%), and pansexual (2%) received services in the express time period, compared with the pre-express time period. The same proportion of individuals identifying as lesbian (1%), bisexual (11%) and other sexual orientation (1%) received services in the express and pre-express time periods. Patients in the express time period had a significantly higher odds of identifying as gay, bisexual, or queer than as straight/heterosexual, compared with those in the pre-express time period (gay aOR: 1.44, 95% CI: 1.29-1.60, p<0.001; bisexual aOR: 1.19, 95% CI: 1.01-1.40, p<0.001; queer aOR: 1.36, 95% CI: 1.08-1.72, p<0.001). No other differences in sexual orientation between time periods were significant.

A higher proportion of patients in the express time period had health insurance (43%) than those in the pre-express time period (29%). Express time period patients had a higher odds of having health insurance than pre-express time period patients, when adjusted for site location (aOR: 1.85, 95% CI: 1.74-1.96, p<0.001).

Figure 6: More patients in the express time period had health insurance, compared to those in the pre-express time period
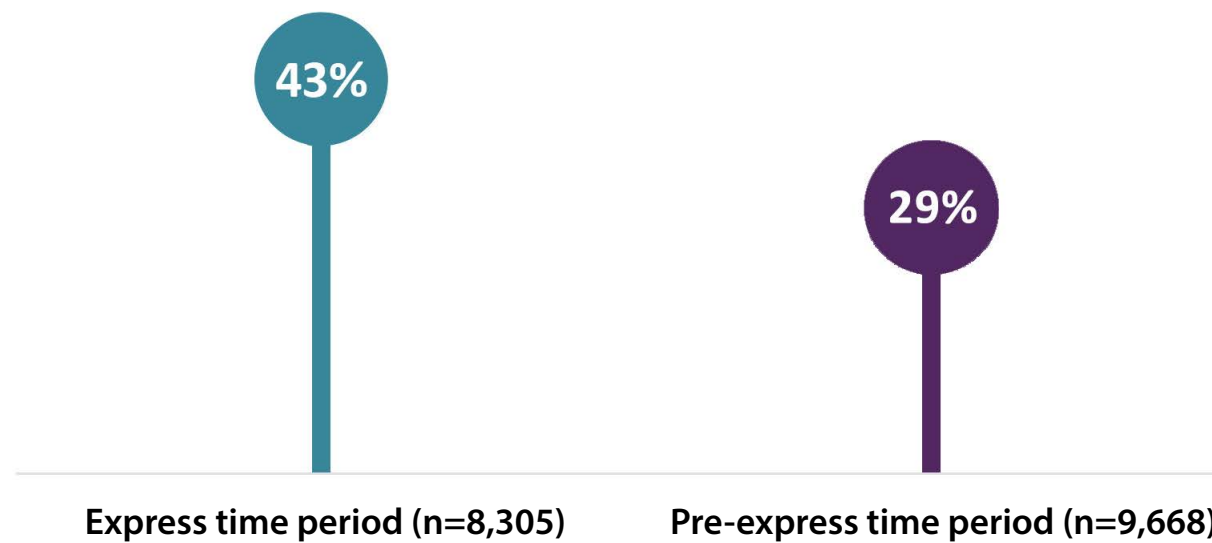
43%

29%

Express time period (n=8,305)   Pre-express time period (n=9,668)

Differences were statistically significant when adjusted for site location

Very small proportions of patients reported ever engaging in transactional sex (express time period: 3%, pre-express time period: 4%), using high-risk drugs (including cocaine, methamphetamine, or heroin); express time period: 6%, pre-express time period: 4%) or using injection drugs (express time period: 1%, pre-express time period: 0%). Patients in the express time period had a significantly lower odds than pre-express patients of reporting engaging in transactional sex, adjusting for site location (aOR: 0.63, 95% CI: 0.49-0.82, p<0.001). Patients in the express time period had higher odds of engaging in high-risk drug use and injection drug use, respectively (high-risk drug use aOR: 1.59, 95% CI: 1.40-1.79, p<0.001; injection drug use OR: 4.04, 95% CI: 2.23-7.30, p<0.001), than those in the pre-express time period.

Figure 7: **A larger proportion of patients in the express time period reported using high-risk and injection drugs, and a smaller proportion reported engaging in transactional sex, compared with those in the pre-express time period**

	Express time period	Pre-express time period
Transactional Sex	3%	4%
High-Risk Drug Use	6%	4%
Injection Drug Use	1%	0%

Differences were statistically significant when adjusted for site location

Do express services attract new patients?

The proportion of new patients in the two time periods were similar

Figure 8: **While the difference was statistically significant, the proportion of new patients in the express and pre-express time periods were similar**

Express time period (n=10,731): 30% New patient, 70% Existing patient

Pre-express time period (n=10,720): 31% New patient, 69% Existing patient

■ New patient ■ Existing patient
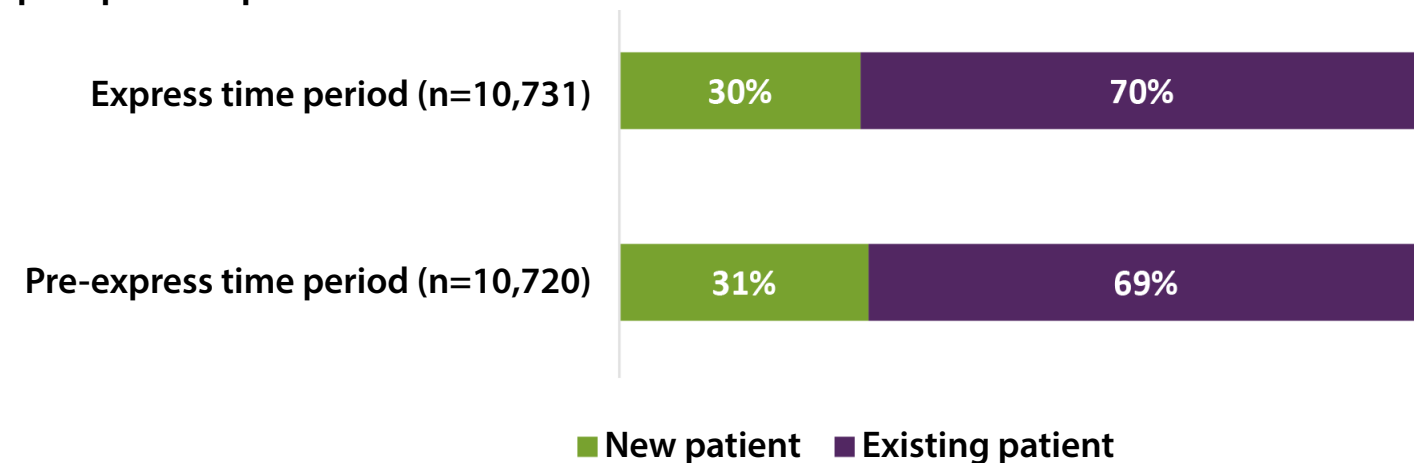
Differences were statistically significant when adjusted for site location

Thirty percent (30%) of visits in the express time period were among first-time patients, while 31% of visits in the pre-express time period were among first-time patients. Express patients had a lower odds of being new than non-express patients, adjusting for site (aOR: 0.932, 95% CI: 0.88-0.99, p=0.018).

How are patients receiving express services the same or different from those receiving non-express services?

Express patients were younger; more frequently people of color, male, and heterosexual; and less frequently insured, engaging in transactional sex, or using high-risk or injection drugs, compared to non-express patients

A greater proportion of express patients were 29 years or younger (55%) than non-express patients (51%). When adjusted for site location, express patients had a higher odds of being 29 years or younger than non-express patients (aOR: 1.10, 95% CI = 1.08, 1.12; p<0.001).

Figure 9:   Express patients were younger than non-express patients

| Express (n=13,071) | 55% | 46% |
| Non-express (n=23,665) | 51% | 49% |

■ 29 years or younger   ■ 30 years or older
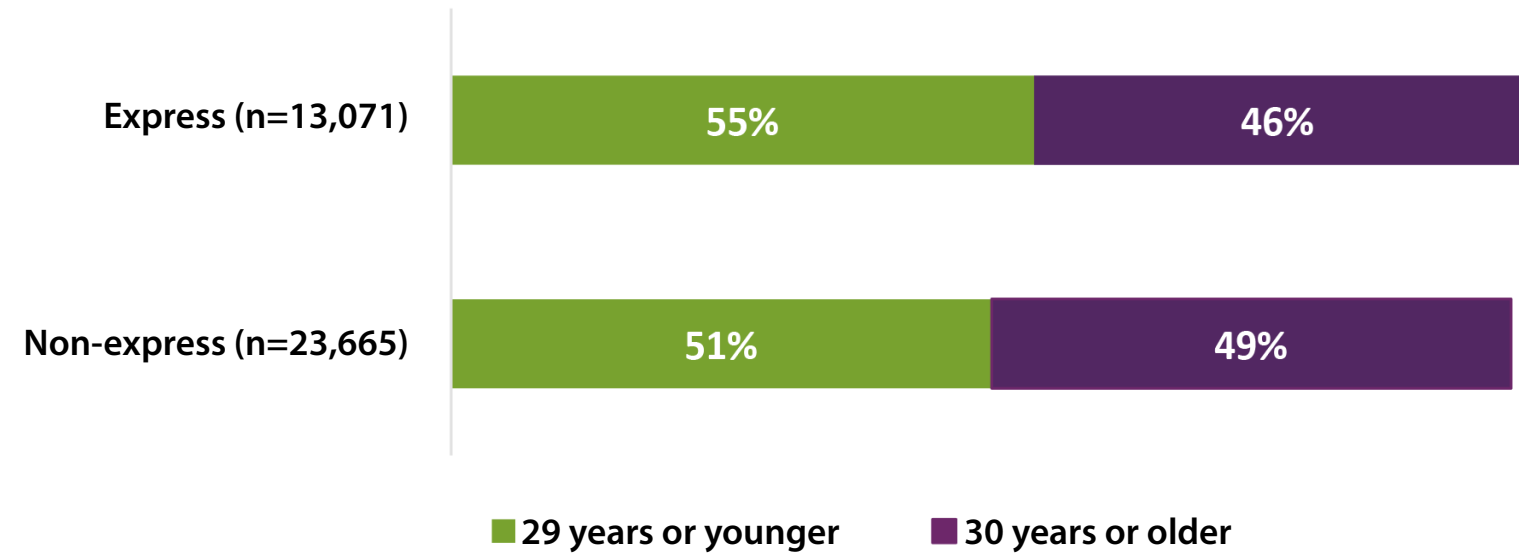
Differences were statistically significant when adjusted for site location

Figure 10:   The majority of patients seeking express and non-express services were African American/Black

| Express (n=12,840) | 52% | 23% | 16% | 7% |
| Non-express (n=23,131) | 48% | 28% | 16% | 6% |

■ African American/Black   ■ White   ■ Other
■ Asian/Pacific Islander   ■ American Indian/Alaska Native   ■ Multiracial
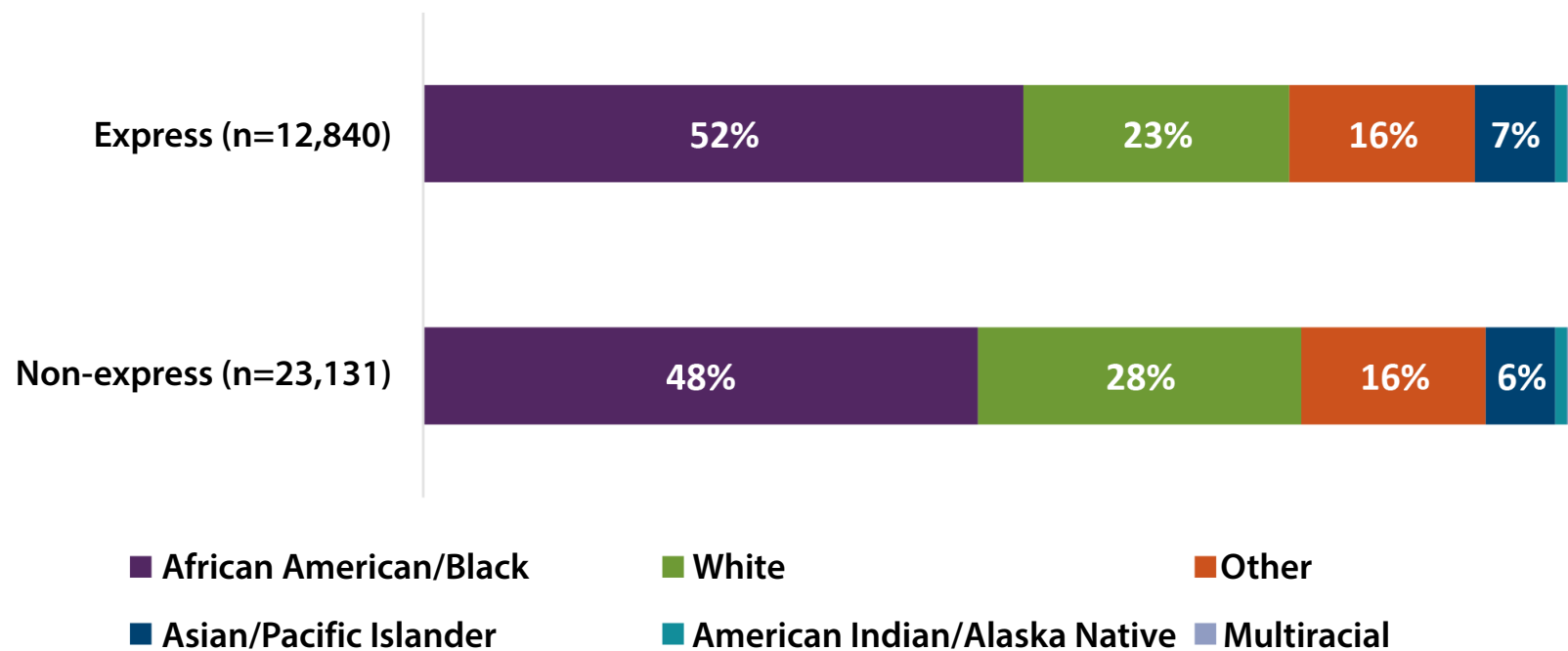
Differences in race were statistically significant for white and Asian and Native Hawaiian/Other Pacific Islander when adjusted for site location

Approximately half of express and non-express patients were African American/Black (52% and 49%, respectively). About one-quarter of express (24%) and non-express (28%) patients were white. Less than 10% of express and non-express patients were Asian and Native Hawaiian/Other Pacific Islander, American Indian/Alaska Native, or multiracial. Patients of other races were 16% of express and non-express groups. When adjusted for site location, express patients had significantly higher odds than non-express patients of identifying as white or Asian and Native Hawaiian/Other Pacific Islander, compared to African American/Black (white aOR: 1.34, 95% CI: 1.26-1.42, p<0.001; Asian and Native Hawaiian/Other Pacific Islander aOR: 1.32, 95% CI: 1.19-1.45, p<0.001). There were no other significant differences by race between express and non-express patients.

One-quarter (25%) of express patients and 30% of non-express patients identified as Hispanic/Latinx. Express patients had lower odds than non-express patients of identifying as Hispanic/Latinx (aOR: 0.85, 95% CI: 0.80-0.90, p<0.001).

Figure 11: **A larger proportion of non-express patients were Hispanic/Latinx**

Express (n=11,067) — 25% Hispanic/Latinx, 75% Not Hispanic/Latinx

Non-express (n=18,896) — 30% Hispanic/Latinx, 70% Not Hispanic/Latinx

■ Hispanic/Latinx ■ Not Hispanic/Latinx
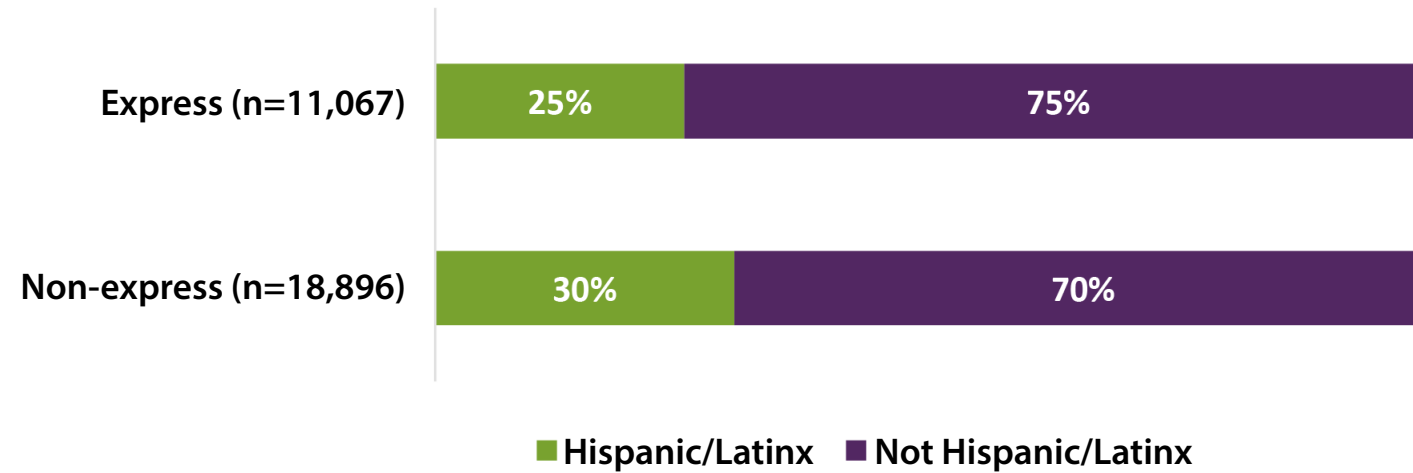
Differences were statistically significant when adjusted for site location

Figure 12: **The majority of patients seeking express and non-express services identified as male**

Express (n=12,627) — 67% Male, 32% Female

Non-express (n=23,377) — 65% Male, 33% Female, 2%

■ Male ■ Female ■ Transgender persons ■ Gender diverse persons
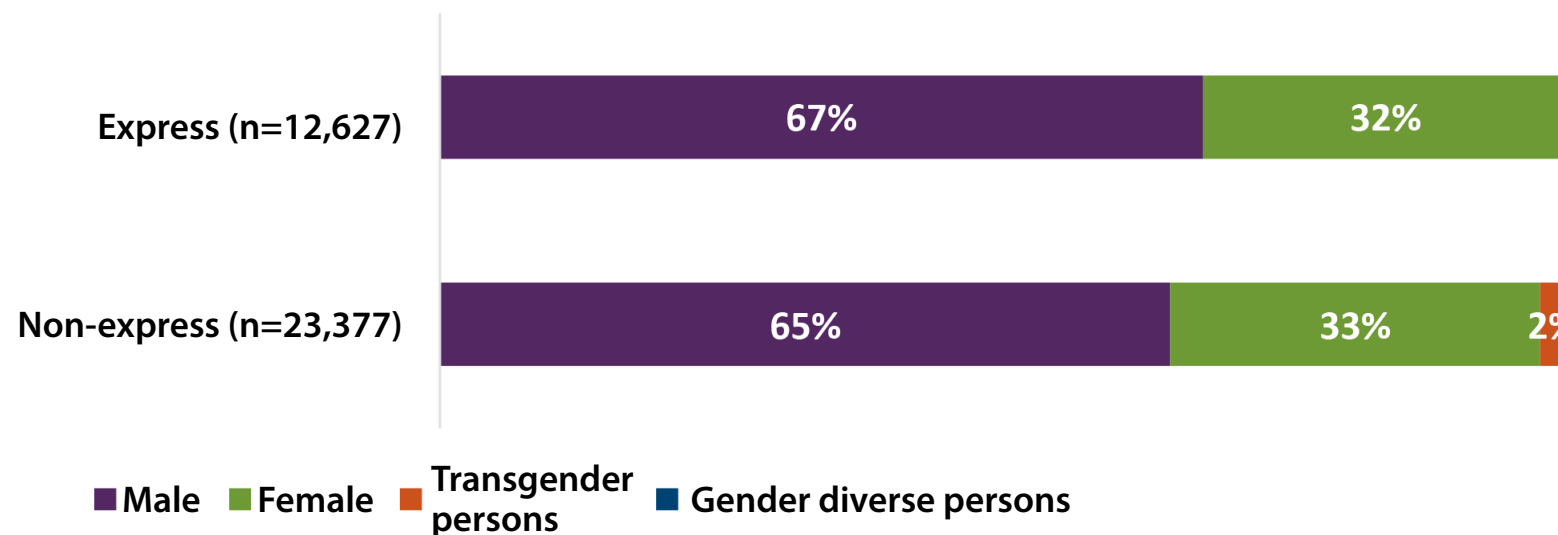
Differences in gender were statistically significant for female and transgender persons when adjusted for site location

Express and non-express patients aligned by gender. Approximately two-thirds of patients identified as male (express 67%, non-express 65%), and one-third of patients identified as female (express 32%, non-express 33%). Among non-express patients, only 2% of patients identified as a transgender persons, and less than 1% (0.4%) of patients identified as non-binary/genderqueer/gender non-conforming. Express patients had significantly lower odds than non-express patients of identifying as female or as a transgender persons, compared with identifying as male, when adjusted for site location (female aOR: 0.84, 95% CI: 0.80-0.89, p<0.001; transgender persons aOR: 0.20, 95% CI: 0.14-0.29, p<0.001).

More express patients identified as straight (57%), compared to non-express patients (38%), and more non-express patients identified as gay (41%), compared to express patients (26%). Eleven percent (11%) of express and non-express patients identified as bisexual, and small proportions of patients identified as queer (express: 3%, non-express: 6%), pansexual (express and non-express: 2%), and lesbian (express and non-express: 1%).

When adjusted for site location, express patients had significantly lower odds than non-express patients of identifying as gay, lesbian, bisexual, or queer than identifying as straight (gay aOR: 0.41, 95% CI: 0.34-0.49, p<0.001; lesbian aOR: 0.33, 95% CI: 0.13-0.84, p<0.017; bisexual aOR: 0.65, 95% CI: 0.51-0.83, p<0.001; queer aOR: 0.36, 95% CI: 0.24-0.54, p<0.001).

Figure 13: The majority of express patients identified as straight/heterosexual, and the largest proportion of non-express patients identified as gay

■ Express (n=840)   ■ Non-express (n=3,726)
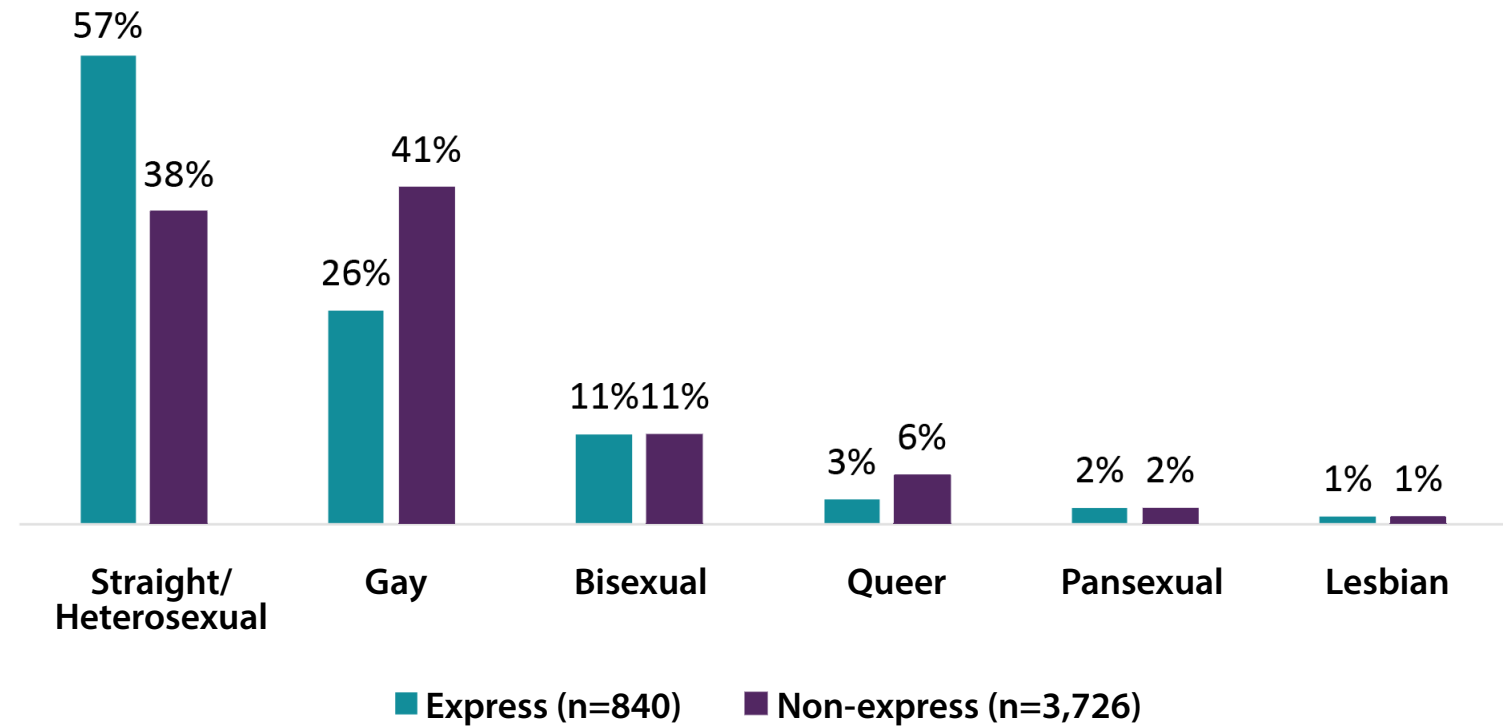
Differences in sexual orientation were statistically significant for gay, lesbian, bisexual, and queer when adjusted for site location

Figure 14:   About one-third of patients had health insurance

29%   33%

Express (n=11,146)   Non-express (n=19,481)

Differences were statistically significant when adjusted for site location

About one-third of express (29%) and non-express (33%) patients had health insurance. When adjusted for site location, express patients had a significantly lower odds than non-express patients of having health insurance (aOR: 0.86, 95% CI: 0.82-0.91, p<0.001).

Figure 15:   Express patients less frequently reported engaging in transactional sex or using high-risk drugs, compared to non-express patients

	Express	Non-express
Transactional Sex	2%	3%
High-Risk Drug Use	1%	2%
Injection Drug Use	1%	1%

Differences were statistically significant for engagement in transactional sex when adjusted for site location

Very small proportions of patients reported ever engaging in transactional sex (express: 2%, non-express: 3%), using high-risk drugs (including cocaine, methamphetamine, or heroin; express: 1%, non-express: 2%), or injecting drugs (express and non-express: 1%). When adjusted for site location, express patients had a significantly lower odds than non-express patients of reporting engagement in transactional sex (aOR: 0.59, 95% CI: 0.36-0.98, p<0.042). There were no significant differences between express and non-express patients related to high-risk or injection drug use.

How often do patients receive express services?

On average, patients received one express visit within the 6-month time period for data collection
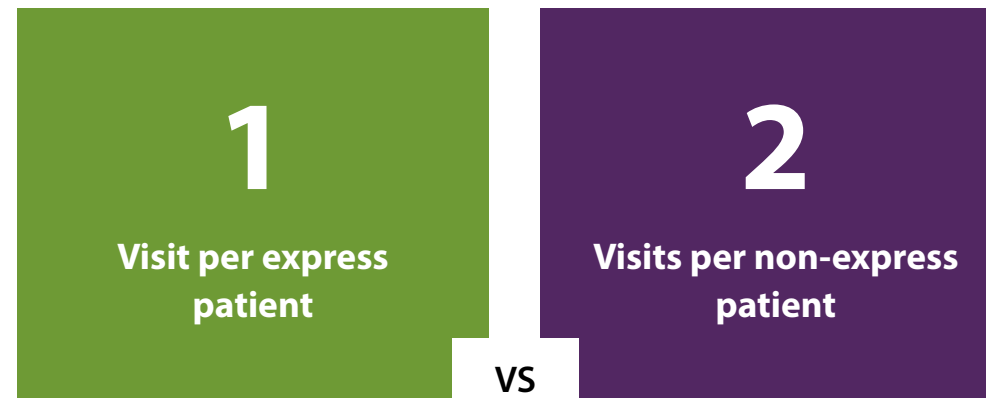
1
Visit per express patient

VS

2
Visits per non-express patient

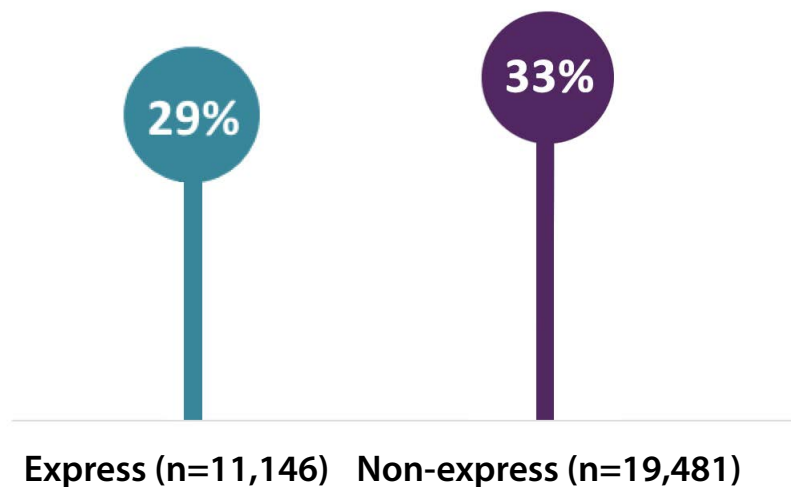*The difference was statistically significant when adjusted for site location*

Express patients had a significantly lower average number of visits (mean: 1, SD: 0.3) than non-express patients (mean: 2, SD: 1.8, p<0.001). Visit types included initial testing, follow-up, and treatment visits that occurred during the project period. When adjusted for site location, express status was a significant predictor of the number of visits per patient; express patients had about one fewer visit in the express period than non-express patients (β: -0.94, 95% CI: -0.97 - -0.91, p<0.001).

Do express services attract new patients?

Express services attracted a higher proportion of new patients than non-express services

Half of express visits were among first-time patients, while 35% of non-express visits were among first-time patients. When adjusted for site location, express patients had 1.75 higher odds of being new than non-express patients (aOR: 1.75, 95% CI: 1.67-1.82, p<0.001).

*Please see **Tables 1 through 29** in the **Technical Appendix** for more details about patient characteristics among express time period, pre-express time period and express and non-express patients.*

Figure 16: **There were more new patients who received express services than non-express services**

Express (n=12,781): New patient 50% | Existing patient 50%

Non-express (n=21,554): New patient 35% | Existing patient 65%

■ New patient ■ Existing patient
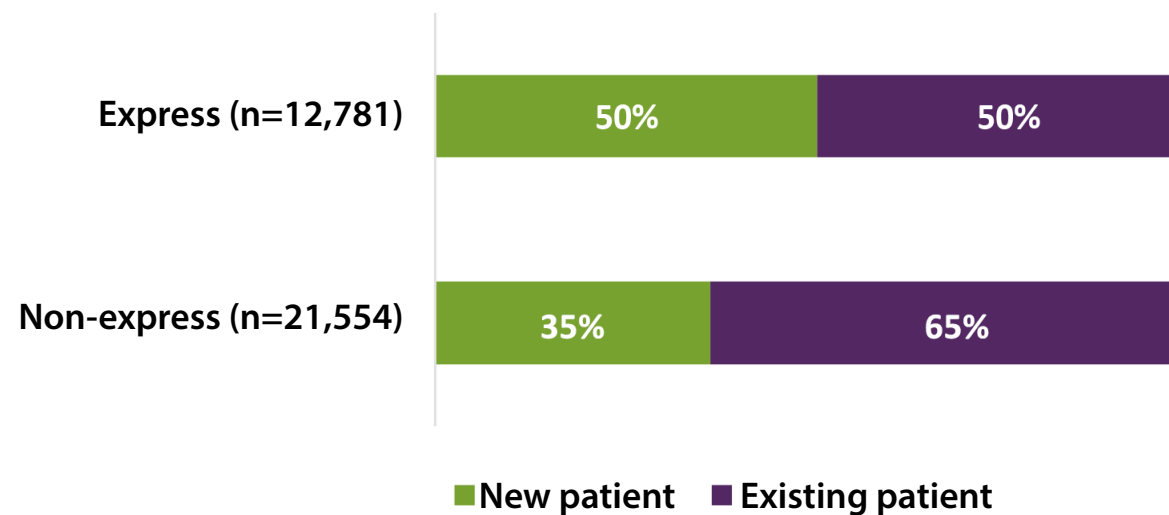
Differences were statistically significant when adjusted for site location

CAPACITY & APPOINTMENT TIME

What effect do express services have on a site's capacity to see patients?

Integrating express services resulted in more visits per day

In the express time period, there was an average of 26 visits per day (SD: 11.3), compared to 23 visits per day (SD: 17.6, p<0.001) in the pre-express time period. The average number of visits per day ranged across participating sites (express time period, pre-express time period): 17-28, 8-24. Time period was a significant predictor of the number of visits per day; express services had about three more visits per day compared with pre-express (β: 3.21, 95% CI: 2.00 – 4.41, p<0.001).

Integrating express services allowed for more non-express visits among symptomatic patients

In the express time period, there was a higher average number of non-express visits per day (mean: 47, SD: 59.0) than express visits (mean: 23, SD: 37.5, p<0.001). The average number of visits per day ranged across participating sites (express, non-express): 4-89, 3-153. Service type was a significant predictor of the number of visits per day, express services had about 23 less visits per day; compared with pre-express (β: -0.31, 95% CI: -0.16 – -0.12, p<0.001).

On average,

7

patients were turned away per day from the three sites that provided data

Figure 17: There was a higher average number of visits per day in the express time period, compared to the pre-express time period

Express time period visits
(26 visits, n=13,673)

Pre-express time period visits
(23 visits, n=11,984)

= 5 visits

Differences were statistically significant when adjusted for site location

Figure 18: There was a higher average number of non-express visits per day than express visits, in the express time period

Express visits
(23 visits, n=15,486)

Non-express visits
(47 visits, n=33,580)

= 5 visits

Differences were statistically significant when adjusted for site location

On average, the majority of patients who were eligible for express services received these services

82%
of express patients were eligible for express services

VS

7%
of non-express patients were eligible for express services

This difference was statistically significant when adjusted for site location

Most patients were triaged appropriately into express and non-express services. Eligibility for express ranged across participating sites (express, non-express): 67% - 100%, 12% - 0%. When adjusted for site location, express patients had a higher odds of being eligible for express compared to non-express services (aOR: 59.55, 95% CI: 49.57-71.55, p<0.001).

What effect do express services have on appointment time?

Total appointment time was significantly shorter for express visits, compared to non-express visits

The average appointment time for express patients (81 minutes, SD: 34 minutes) was significantly shorter than the average appointment time for non-express patients (173 minutes, SD: 126 minutes, p<0.001). The average time of total visit ranged across participating sites (express, non-express): 32-105 minutes, 58-181 minutes. The difference between the average appointment times was 96 minutes, when adjusted by location (β: -96.20, 95% CI: -64.13 - -57.24, p<0.001).

*Please see **Tables 30 through 38** in the **Technical Appendix** for more details about capacity and time among express time period, pre-express time period and express and non-express patients.*

Figure 19: **Express visits were significantly shorter than non-express visits**

Express
(81 minutes, n=14,023)

Non-express
(173 minutes, n=60,802)

= 60 minutes
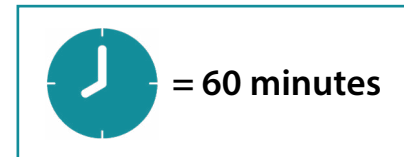
The difference was statistically significant when adjusted for site location

TESTING

What are testing rates of express patients compared to non-express patients?

Express patients received STI testing more frequently than 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).

Express patients had a higher odds than non-express patients of being tested for chlamydia (aOR=2.09, 95% CI: 1.95-2.24, p<0.001), gonorrhea (aOR=1.61, 95% CI: 1.50-1.71, p<0.001), syphilis (aOR=1.90, 95% CI: 1.79-2.02, p<0.001), and HIV (aOR=3.50, 95% CI: 3.29-3.72, p<0.001), when adjusted for site location.

Testing ranged widely across participating sites (express, non-express): Chlamydia (57%-100%, 42%-86%), gonorrhea (10%-100%, 13%-85%), HIV (1%-99%, 2%-77%), syphilis (1%-99%, 2%-77%).

Figure 20: More express patients received testing for chlamydia, gonorrhea, syphilis, and HIV than non-express patients
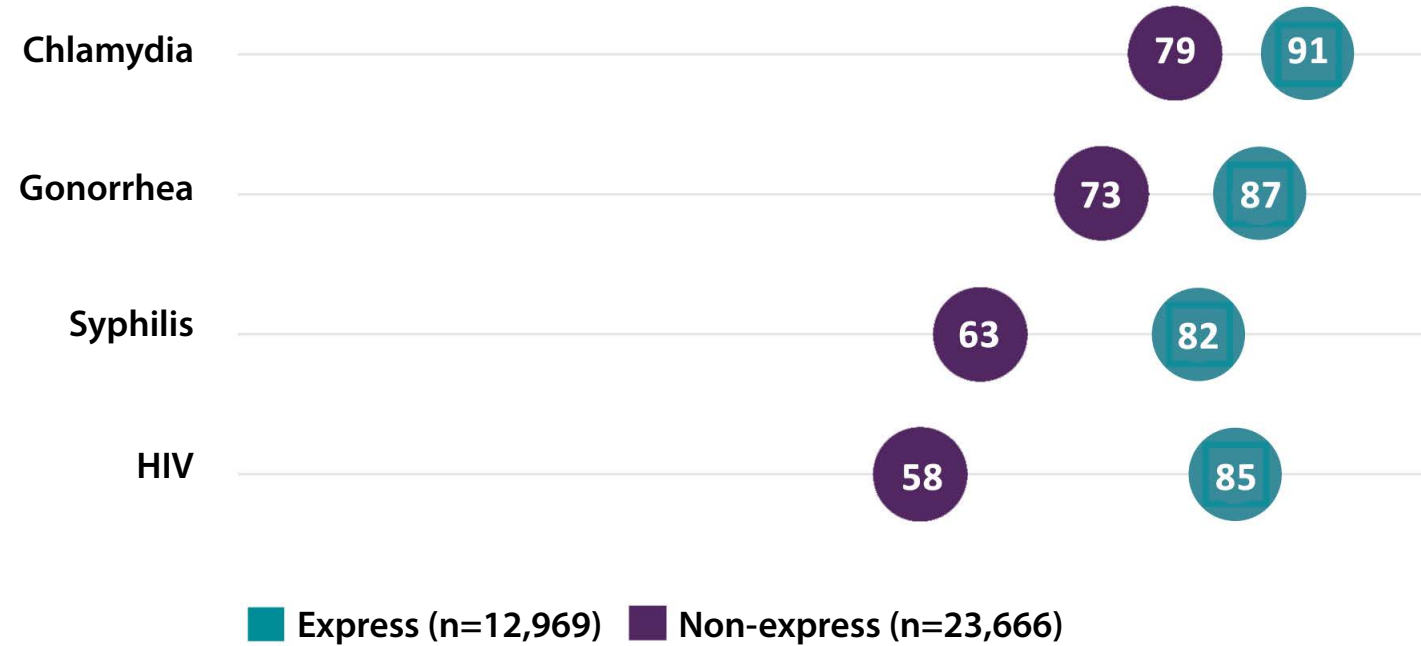
	Express	Non-express
Chlamydia	91	79
Gonorrhea	87	73
Syphilis	82	63
HIV	85	58

■ **Express (n=12,969)**   ■ **Non-express (n=23,666)**

Differences were statistically significant when adjusted for site location

POSITIVITY

What are positivity rates of express patients compared to non-express patients?

Express patients had lower STI positivity than non-express patients

Figure 21:   Positivity for chlamydia, gonorrhea, syphilis, and HIV was lower among express patients than among non-express patients

Chlamydia
- Express: 6%
- Non-express: 12%

Gonorrhea
- Express: 2%
- Non-express: 9%

Syphilis
- Express: 6%
- Non-express: 22%

HIV
- Express: 0%
- Non-express: 3%

■ Express   ■ Non-express
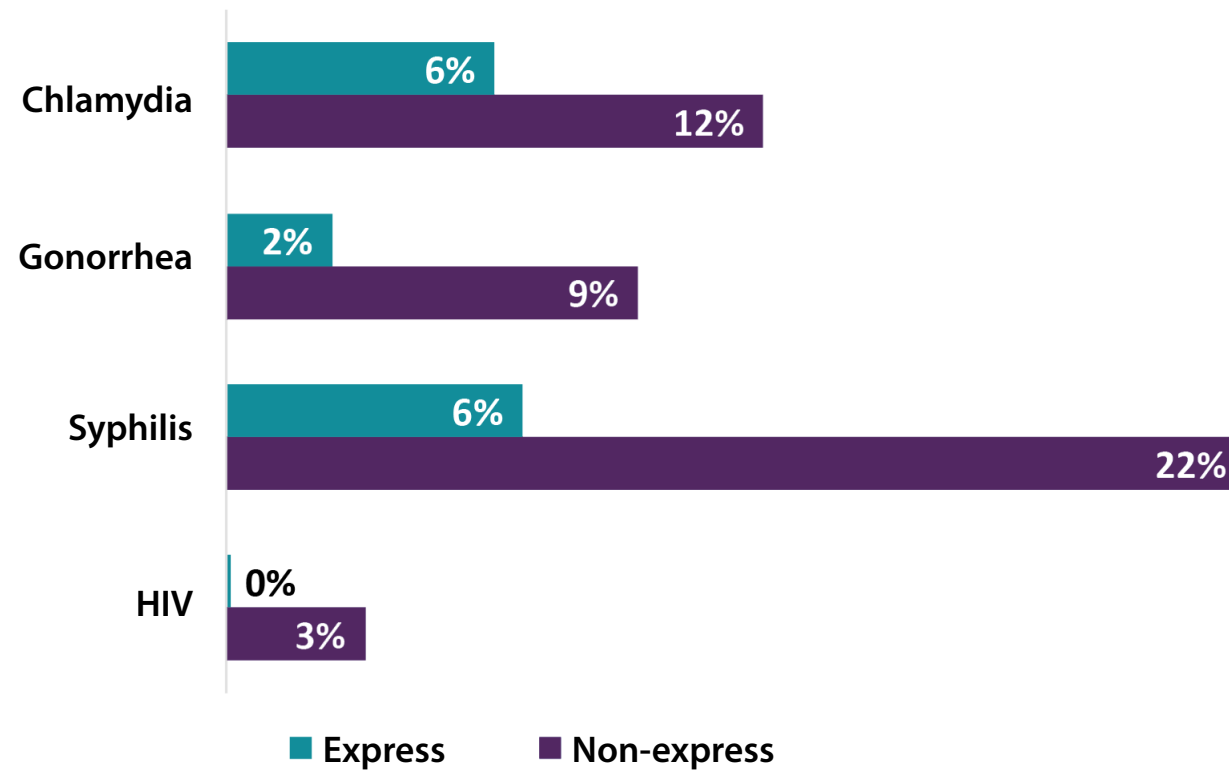
Percentages are taken from total number tested per group (express, non-express): chlamydia (11,799, 18,631), gonorrhea (11,220, 17,216), syphilis (1,288, 3,802), HIV (1,602, 3,632).

Differences were statistically significant when adjusted for site location

Among express patients, positivity for chlamydia (6%), gonorrhea (2%), syphilis (6%), and HIV (0%) at their most recent visit was lower among express patients than among non-express patients (12%, 9%, 22%, 3%, respectively).

Express patients had a lower odds than non-express patients of testing positive for chlamydia (aOR=0.45, 95% CI: 0.41-0.49, p<0.001), gonorrhea (aOR=0.26, 95% CI: 0.22-0.29), syphilis (aOR=0.45, 95% CI: 0.34-0.58, p<0.001) or HIV (aOR=0.28, 95% CI: 0.13-0.61; p<0.001), when adjusted for site location.

Positivity ranged across participating sites (express, non-express): Chlamydia (2%-8%, 2%-13%), gonorrhea (1%-5%, 3%-12%), HIV (0%-2%, 0%-3%), syphilis (0%-26%, 0%-37%).

Differences In Chlamydia and Gonorrhea Positivity by Key Characteristics

Chlamydia positivity among express patients was higher among African American/Black and young people and lower among Hispanic/Latinx, LGBTQ+, and male patients, compared to non-express patients

Figure 22: Larger percentages of express patients who were African American/Black and smaller percentages of those who were white had positive chlamydia results, compared to non-express patients

	African American/Black	White	Asian/Pacific Islander	Other
Express (n=681)	59%	18%	7%	16%
Non-express (n=2,141)	53%	24%	7%	17%

Differences were not statistically significant when adjusted for site location

Figure 23: Among express patients who had positive chlamydia results, lower percentages were Hispanic/Latinx or LGBTQ+, and a larger percentage was 29 years or younger, compared with non-express patients

26%
were **Hispanic/Latinx**, compared with 32% of non-express patients

45%
were **LGBTQ+**, compared with 69% of non-express patients

77%
were **29 years or younger**, compared with 66% of non-express patients

Differences in ethnicity and age were statistically significant when adjusted for site location

Express and non-express patients who tested positive for chlamydia differed by race, ethnicity, LGBTQ+ status, age, and gender, although only differences by ethnicity and age were statistically significant, when adjusted for site location. Express patients had a lower odds of identifying as Hispanic/Latinx (aOR=0.74, 95% CI: 0.60-0.91, p<0.05) and a higher odds of being 29 years or less, compared with non-express patients (aOR=1.66, 95% CI: 1.36-2.03, p<0.001).

Figure 24: Among express patients who had positive gonorrhea results, lower percentages were Hispanic/Latinx or LGBTQ+, and a larger percentage was 29 years or younger, compared with non-express patients

25%
were **Hispanic/Latinx**, compared with 30% of non-express patients

44%
were **LGBTQ+**, compared with 82% of non-express patients

66%
were **29 years or younger**, compared with 53% of non-express patients

Differences in LGBTQ+ status and age were statistically significant when adjusted for site location

Among patients who tested positive for gonorrhea, express patients were younger than non-express patients, with express patients having a higher odds of being 29 or less compared with their non-express counterparts, when adjusted for site location (aOR=1.60, 95% CI: 1.21-2.11, p<0.001). Express and non-express patients who tested positive for gonorrhea differed significantly by LGBTQ+ status, although the sample size of express patients with available LGBTQ+ data was very small. There were no other statistically significant differences in key characteristics between express and non-express patients who tested positive for gonorrhea.

Express and non-express patients who tested positive for syphilis and HIV did not differ significantly by any key characteristics, after adjusting for location.

TREATMENT

What effect do express services have on rates of treatment?

Treatment provision was lower among express than non-express patients

Figure 25: **Fewer express patients were treated for chlamydia or gonorrhea than non-express patients**

Chlamydia — 74 91

Gonorrhea — 78 90

■ Express   ■ Non-express

Percentages are from the total number of patients who received positive test results per group (express, non-express): chlamydia (683, 2,850), gonorrhea (257, 1,784).

Differences were statistically significant when adjusted for site location

The proportions of express patients who were provided treatment within 14 days of their most recent visit for chlamydia (74%) or gonorrhea (78%) were lower than for non-express patients (91%, 90%, respectively).

Express patients had a lower odds of being treated within 14 days of their most recent visit for chlamydia (aOR=0.25, 95% CI: 0.19-0.33, p<0.001) or gonorrhea, (aOR=0.35, 95% CI: 0.24-0.51, p<0.001), compared with non-express patients, when adjusted for site location.

Treatment provision ranged across participating sites (express, non-express): Chlamydia (22%-100%, 50%-95%), gonorrhea (22%-100%, 44%-100%).

What effect do express services have on time to treatment initiation?

There was a less than one week difference between testing and treatment between express and non-express patients

Figure 26: The average number of days between STI testing and result posted was higher for express patients, compared with non-express patients

	Express	Non-express
Chlamydia	3.0	1.3
Gonorrhea	2.8	2.2
Syphilis	2.3	1.7
HIV	2.0	1.8

Means are from the total number of patients who provided data for days between testing and result posted for each STI (express, non-express): chlamydia (1,793, 5,594); gonorrhea (1,434, 5,068); syphilis (1,268, 3,904); HIV (665, 3,426).

The mean difference in days between chlamydia testing and results posted was 1.48 days longer for express patients than non-express patients (β= 1.48; 95% CI=1.40-1.57, p<0.001); when adjusted for site location. The mean difference in days between gonorrhea testing and results posted was 0.25 days longer for express patients than non-express patients (β= 0.25; 95% CI=0.15-0.36, p<0.001), when adjusted for site location. Both of these differences were statistically significant. The mean difference in days between syphilis testing and results posted was also statistically significan at 0.57 days longer for express patients than non-express patients (β=0.57; 95% CI=0.49-0.65, p<0.001), when adjusted for site location.

Among express patients who received results within 14 days of their most recent visit, the average time for results to be posted was three days for chlamydia (SD: 1.6 days), 2.8 days for gonorrhea (SD: 1.7 days), 2.3 days for syphilis (SD: 1.3 days), and 2.0 days for HIV (SD: 1.5 days). Among non-express patients, the average time for results to be posted was 1.3 days for chlamydia (SD: 1.8 days), 2.2 days for gonorrhea (SD: 2.0 days), 1.7 days for syphilis (SD: 1.2 days), and 1.8 days for HIV (SD: 1.6 days).

The average number of days between testing and result posted ranged across participating sites (express, non-express): Chlamydia (0.2-4.2, 0.2-2.9), gonorrhea (0.0-4.0, 0.6-3.9), HIV (0.0-2.3, 0.2-2.4), syphilis (0.0-3.1, 0.2-2.4).

Figure 27: On average, results were posted less than two days later for express patients, compared with non-express patients

Chlamydia	1.5
Gonorrhea	0.6
Syphilis	0.3
HIV	0

■ Difference in mean days between testing and result posted (express - non-express = difference), adjusted for site location
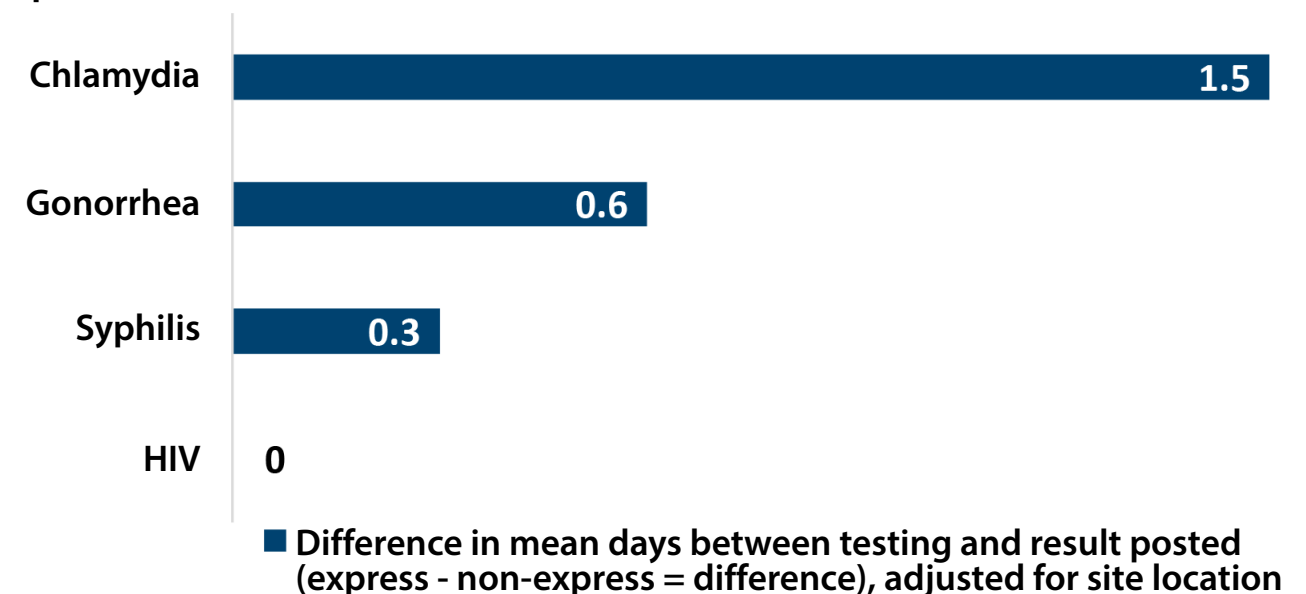
Differences in time were statistically significant for chlamydia, gonorrhea, and syphilis when adjusted for site location

Figure 28: **The average number of days between STI testing and treatment initiation was higher for express patients, compared with non-express patients**

	Express	Non-express
Chlamydia	6.6	0.2
Gonorrhea	6.1	0.1

Means are from the total number of patients who provided data for days between testing and treatment provision/initiation for each STI (express, non-express): Chlamydia (490, 1,735); Gonorrhea: (187, 1,259).

Among express patients who initiated or were provided treatment within 14 days of being tested at their most recent visit, the time between testing and treatment initiation/provision was 6.6 days for chlamydia (SD: 3.0 days), and 6.1 days for gonorrhea (SD: 3.1 days). Among non-express patients, the time between testing and treatment initiation/provision was slightly lower at 0.2 days for chlamydia (SD: 1.4 days) and 0.1 days for gonorrhea (SD: 0.9 days).

The average number of days between testing and treatment ranged across participating sites (express, non-express): Chlamydia (0.2-6.7, 0.1-1.4) and gonorrhea (0.0-8.0, 0.0-1.5).

The mean difference in days between chlamydia testing and treatment initiation/provision was 6.37 days longer for express patients than non-express patients (β= 6.37; 95% CI=6.18-6.56, p<0.001) and 5.98 days longer for express patients than non-express patients for gonorrhea (β=5.98; 95% CI=5.76-6.20, p<0.001), when adjusted for site location.

Figure 29: **On average, treatment initiation or provision occurred less than one week later for express patients, compared with non-express patients**

Chlamydia — 6.4

Gonorrhea — 6.0

■ **Difference in mean days between testing and treatment initiation or provision (express - non-express = difference)**
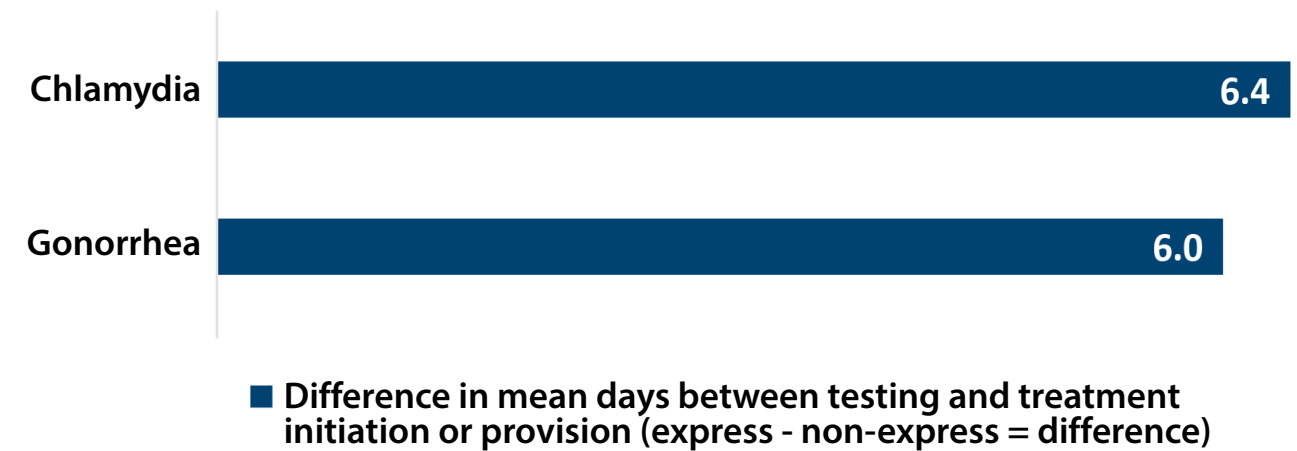
Differences were statistically significant when adjusted for site location

PrEP

What effect do express services have on PrEP uptake?

Express patients were less frequently on PrEP, but more frequently provided with PrEP counseling, than non-express patients

Figure 30: At their most recent visit, less than half the proportion of express patients were currently on PrEP, and more than five times the proportion of express patients were provided PrEP counseling, compared with non-express patients

Patients currently on PrEP
- 7%
- 16%

Patients provided PrEP counseling
- 27%
- 5%

■ Express (n=1,235) ■ Non-express (n=6,234)
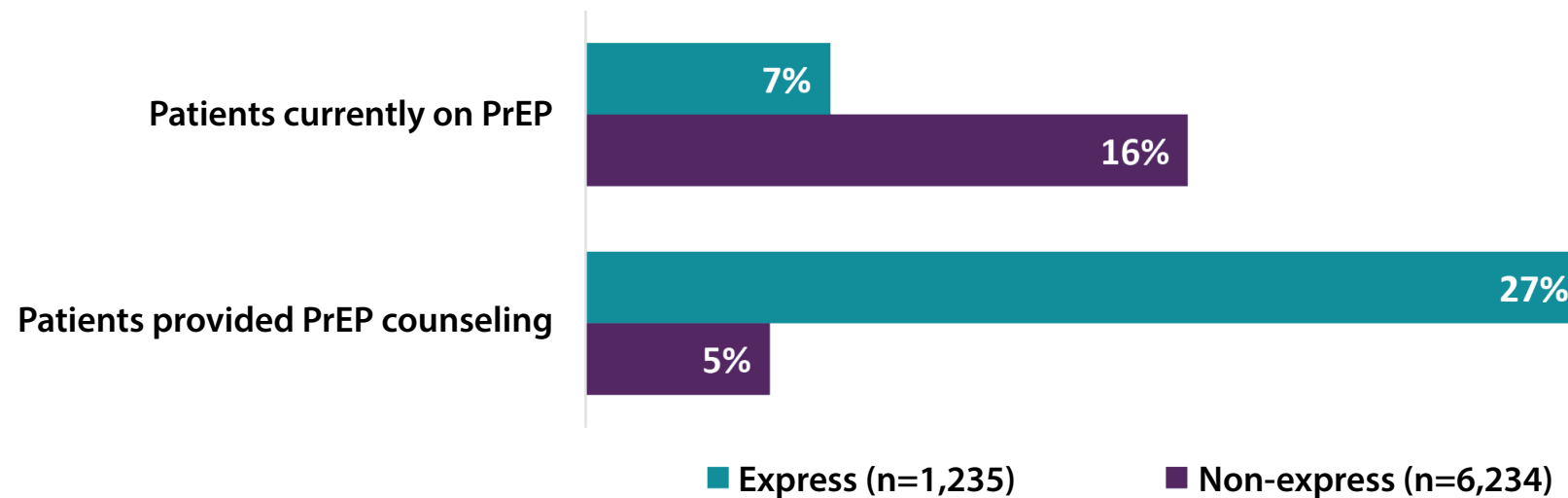
Data are from three sites that provided information on PrEP update and usage

Data reported in this figure are descriptive. Cardea did not calculate statistically significant differences in PreP due to data limitations.

Approximately 7% (n=80) of express and 16% (n=1,105) of non-express patients with available PrEP data were on PrEP at their most recent visit. However, more than one-quarter (27%) of express, compared with 5% of non-express, patients with available PrEP data were provided PrEP counseling at their most recent clinic visit.

The percentage of patients currently on PrEP ranged across participating sites (express, non-express): (4%-9%, 3%-27%). The percentage of patients who were provided with PrEP counseling also ranged across participating sites (express, non-express): (0%-75%, 2%-9%).

*Please see **Tables 39 through 54** in the **Technical Appendix** for more details about STI testing and treatment among express and non-express patients.*

SATISFACTION

Sites contributed 1,402 patient satisfaction surveys to learn how satisfaction differs between express and non-express patients

Figure 31: Approximately half of patient satisfaction surveys were from express patients

	Express	Non-express	Total
New York City	141	259	400
Nashville	95	146	241
Monroe County	103	112	215
Orange County	122	79	201
Seattle	56	104	160
Denver	53	89	142
Howard Brown	43		43

■ Express ■ Non-express
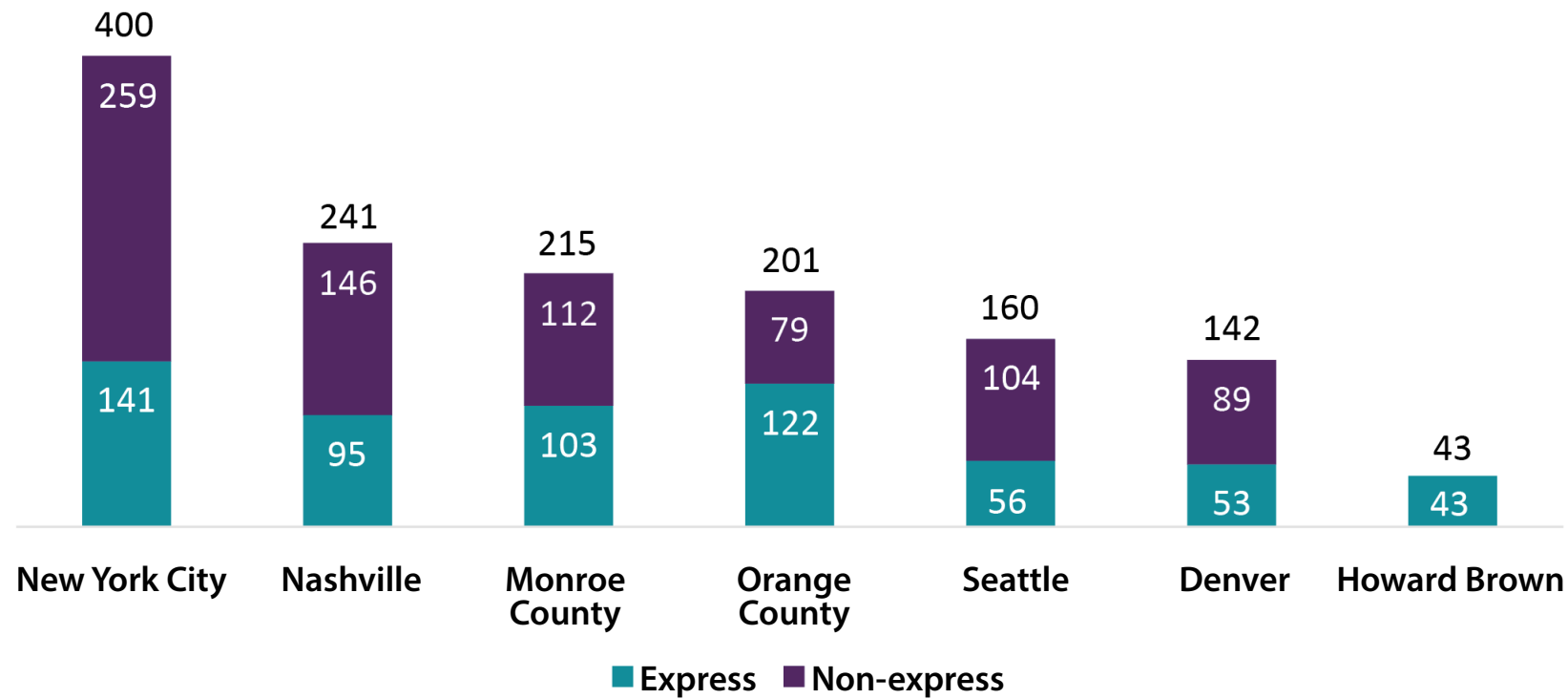
All seven sites administered patient satisfaction surveys. Among the 1,402 surveys submitted, New York City had the largest number of surveys (n=400). Of the surveys submitted, 613 (44%) were from express visits, and 789 (56%) were from non-express visits. Patients were not told which type of visit they received. Most (97%) respondents completed the survey in English, while 3% of respondents completed the survey in Spanish.

Figure 32: Key characteristics aligned across patient satisfaction survey respondents and patients included in the program data (%)

Male — 66 69

Not straight/heterosexual — 52 59

29 years or younger — 52

African American/Black — 47 50

Hispanic/Latinx — 29 31

■ **Patient satisfaction survey respondents**   ■ **Patients from program data**
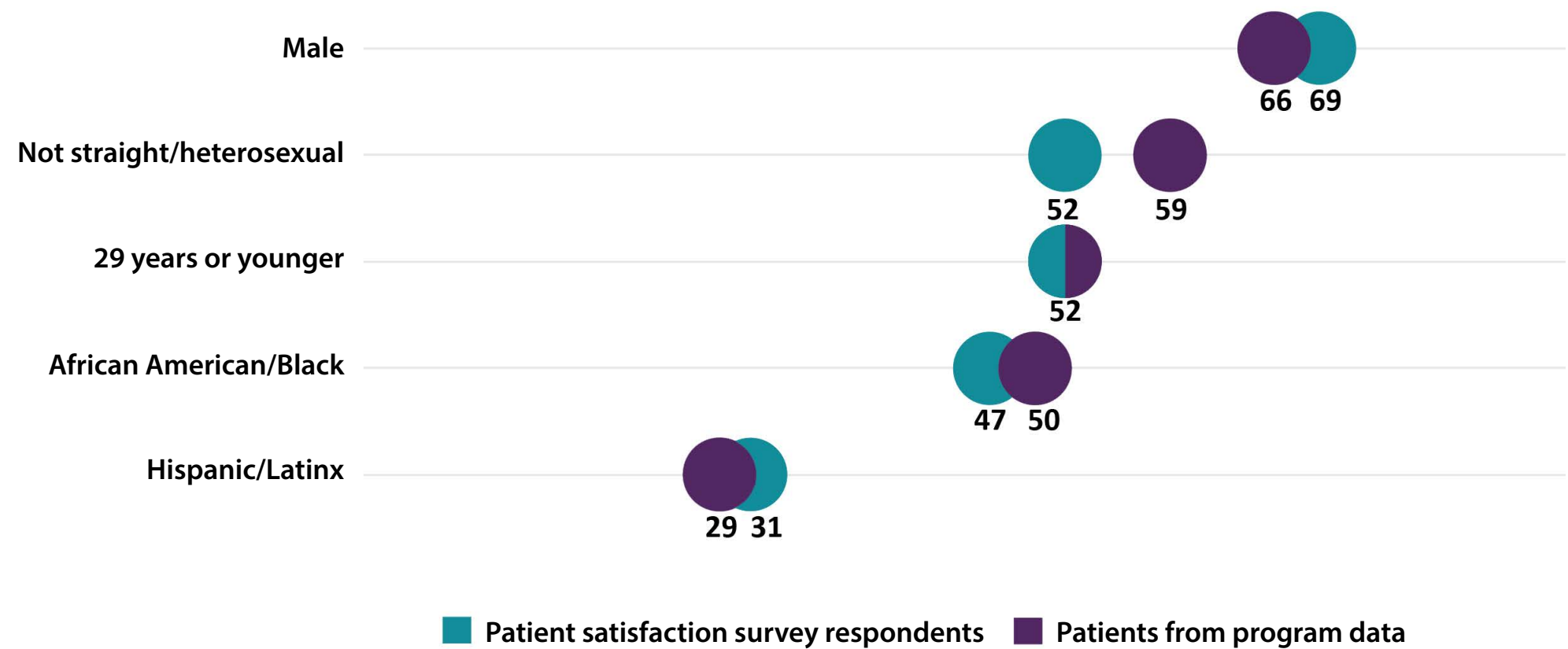
About half of patient satisfaction survey respondents indicated that they were African American/Black (47%), not straight or heterosexual (52%, including gay, lesbian, same gender-loving, bisexual, queer, questioning, unsure, not listed, prefer not to say), and 29 years or younger (52%). Approximately one-third (29%) of respondents indicated that they were Hispanic/Latinx, Latino/a/x, or Spanish, and approximately two-thirds (66%) indicated that they were male. Patient satisfaction survey respondents were similar to those in the program data, in which 50% were African American/Black, 59% not straight/heterosexual, 52% 29 years or younger, 31% Hispanic/Latinx, and 69% male.

To what extent are patients satisfied with express services?
Are there differences in patient satisfaction between those who do and do not receive express services?

Nearly all express and non-express patients were satisfied with their visits

100%
of express patients reported being satisfied overall with their visit

VS

98%
of non-express patients reported being satisfied overall with their visit
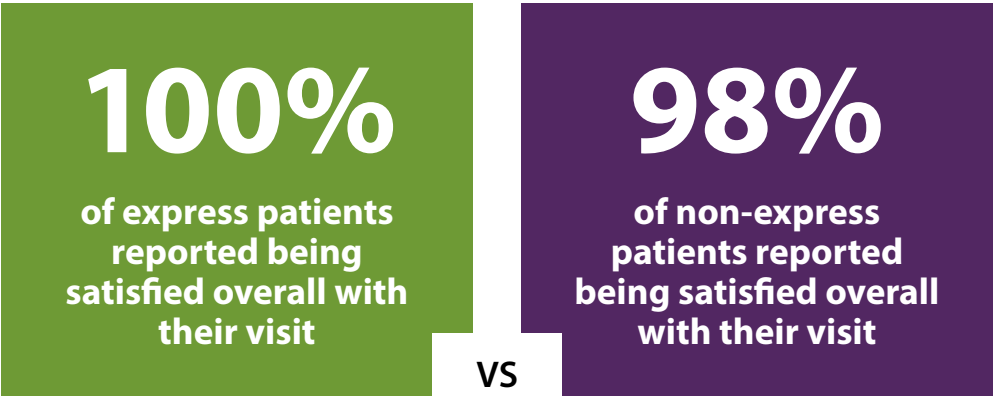
This difference was statistically significant when adjusted for site location

With rounding, 100% of express patients (n=606) and 98% of non-express patients (n=743) reported being satisfied overall with their clinic visits. This difference was statistically significant, when adjusted for site location (aOR: 10.84, 95% CI: 1.42 – 82.94, p=0.022).

Most patients would recommend the clinic to a friend

Figure 33:   A higher proportion of express patients would recommend the clinic to a friend than non-express patients

Express (n=604): Likely (9-10) **91%** | Neutral (7-8) **7%** | Unlikely (1-6) **2%**

Non-express (n=762): Likely (9-10) **87%** | Neutral (7-8) **11%** | Unlikely (1-6) **2%**

■ Likely (9-10)   ■ Neutral (7-8)   ■ Unlikely (1-6)
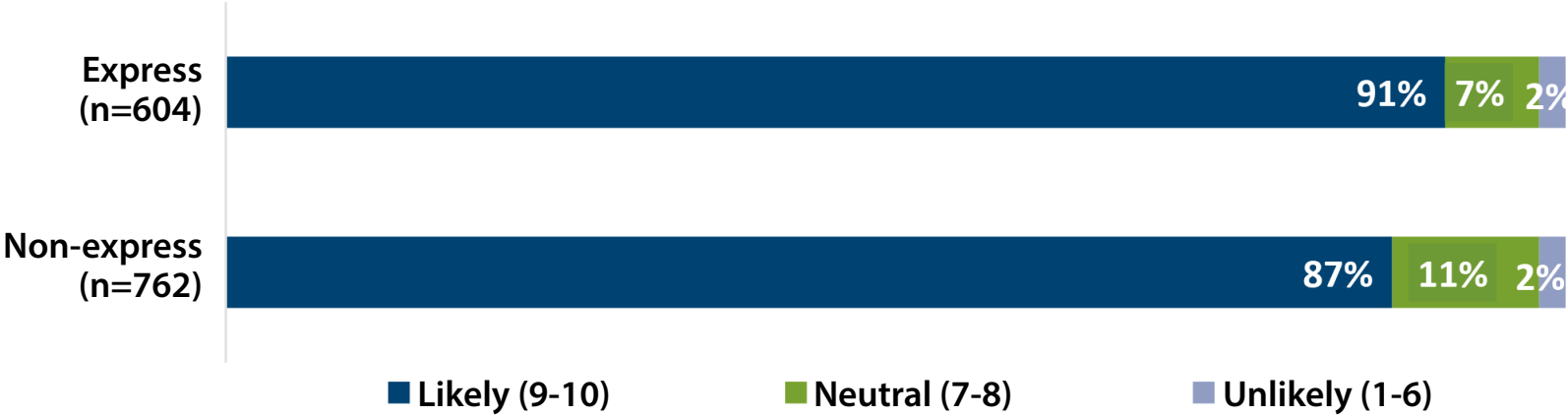
When asked to rate how likely they were to recommend testing at the clinic to a friend, on a scale from 1 (not at all likely) to 10 (extremely likely), 91% of express patients, compared with 87% of non-express patients, selected 9 or 10. The net promoter score for express patients was 4% higher than among non-express patients.

Net promoter scores

89%
Express

VS

85%
Non-express
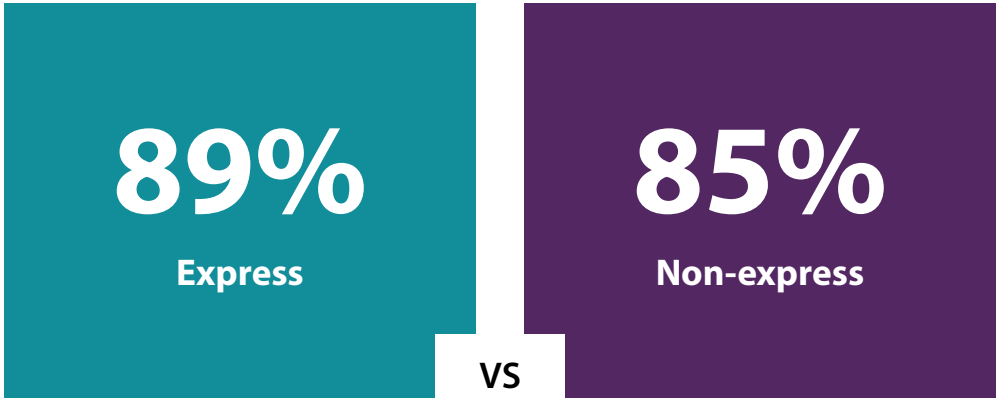
To what extent are patients comfortable with the staff and clinic environment?

Most patients were satisfied with clinic staff and wait time

Figure 34: **Most express and non-express patients were satisfied with clinic staff and wait time**

Express (n=606) Non-express (n=743)

	Express	Non-express
The staff treated me with respect	100%	100%
I felt respected during my time at the clinic	100%	99%
I have confidence in the staff I met	100%	98%
The amount of time I spent with staff during my visit felt right	99%	98%
The length of time I waited was ok	95%	91%
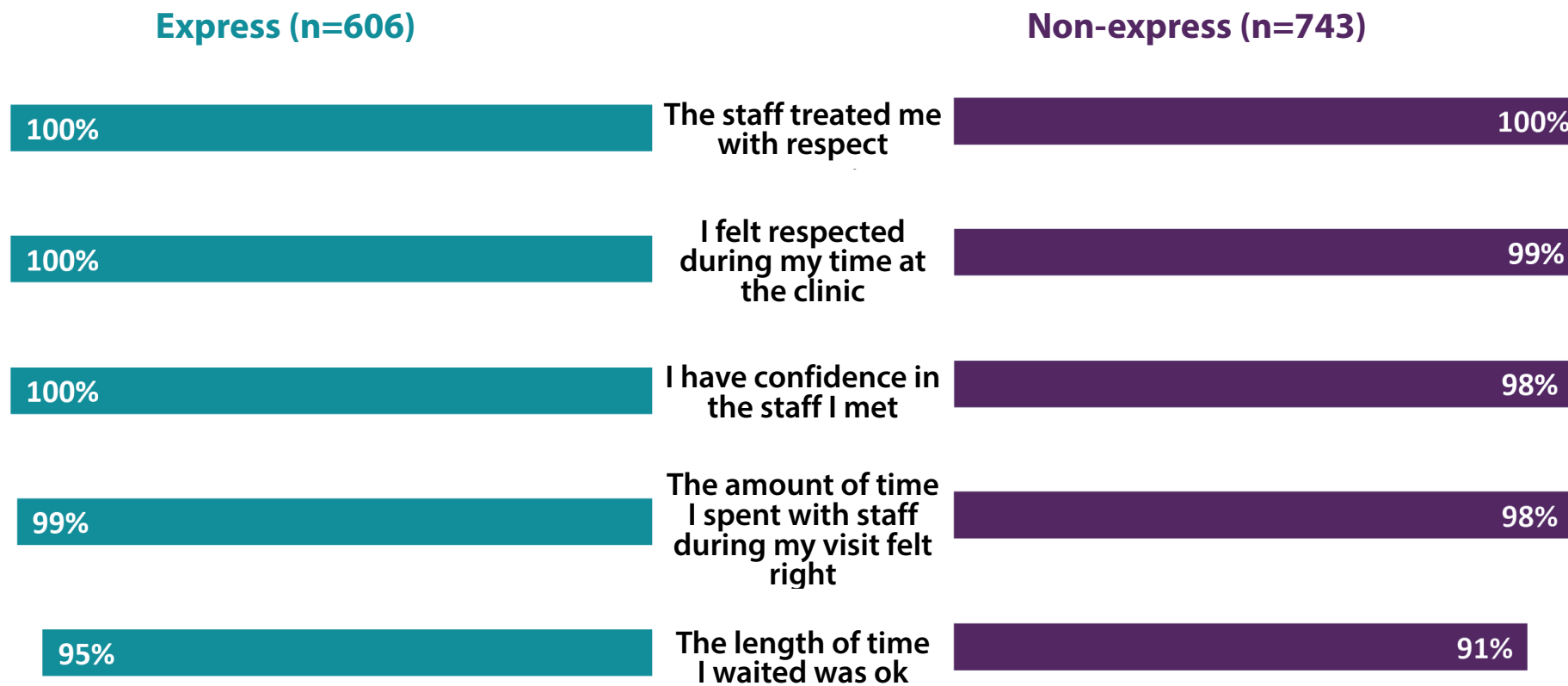
The difference in agreement that "The length of time I waited was ok" was statistically significant when adjusted for site location. No other differences were statistically significant.

Most respondents reported high levels of satisfaction with clinic staff and wait time, regardless of whether they were express or non-express patients. Nearly all respondents reported that they agreed or strongly agreed that the staff treated them with respect (express and non-express: 100%), felt respected during their time at the clinic (express: 100%, non-express: 99%), had confidence in the staff they met (express: 100%, non-express: 98%), felt the amount of time spent with staff during their visit was right (express: 99%, non-express: 98%), and were ok with the length of time they waited (express: 95%, non-express: 91%).

Express patients had a higher odds of agreeing that the length of time they waited was ok, compared to non-express patients, when adjusted for site location (aOR: 1.97, 95% CI: 1.24-3.12, p=0.004). Satisfaction with clinic staff or time did not differ significantly between express and non-express patients for other indicators.

Figure 35:   Most express and non-express patients were satisfied with services and information received

Express (n=606)   **Non-express (n=743)**

	I felt in control of the services I received today	
100%		97%

	The services I received addressed my needs	
99%		98%

	The intake process was clear	
98%		97%

	The instructions I was given to self-collect were easy to understand	
98%		91%

	I felt comfortable self-collecting samples	
97%		91%
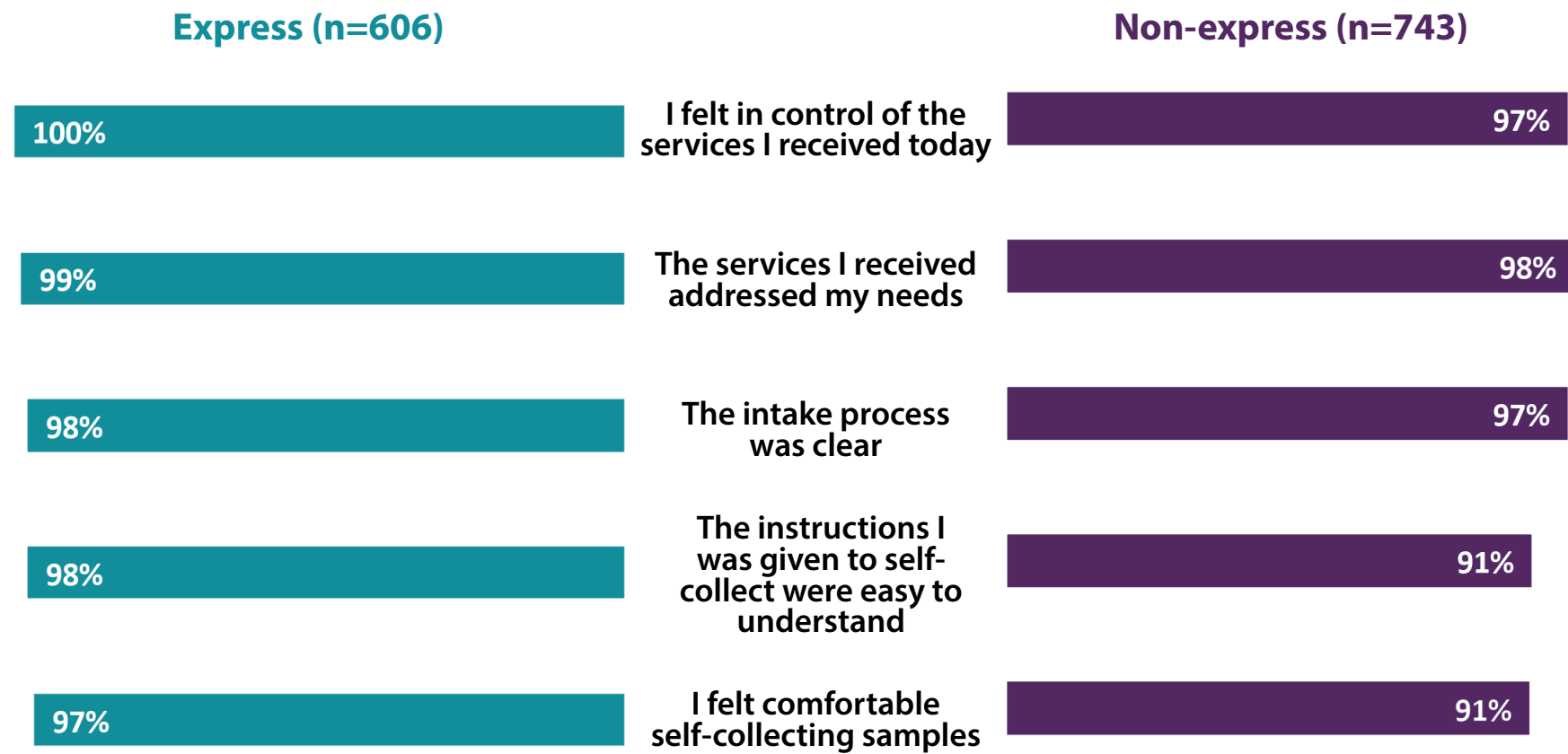
The differences in agreement that "The instructions I was given to self-collect were easy to understand" and "I felt comfortable self-collecting samples" were statistically significant when adjusted for site location. No other differences were statistically significant.

Most respondents reported high levels of satisfaction with services and information received, regardless of whether they were express or non-express patients. Nearly all respondents reported that they agreed or strongly agreed that they felt in control of the services they received (express: 100%; non-express: 97%), that the services they received addressed their needs (express: 99%, non-express: 98%), that the intake process was clear (express: 98%, non-express: 97%), that the instructions given to self-collect were easy to understand (express: 98%, non-express: 91%), and that they felt comfortable self-collecting samples (express: 97%, non-express: 91%).

Express patients had a higher odds of agreeing that the instructions given to self-collect were easy to understand (aOR: 3.52, 95% CI: 1.29-9.62, p=0.014) and that they felt comfortable self-collecting samples, compared to non-express patients (aOR: 2.60, 95% CI: 1.12-6.02, p=0.026), when adjusted for site location. Satisfaction with services or information received did not differ significantly between express and non-express patients for other indicators.

Figure 36:   A lower proportion of African American/Black patients who received express services agreed that the instructions given to self-collect were easy to understand than those who received non-express services

Asian/Native Hawaiian or Other Pacific Islander
- Express: 100%
- Non-express: 84%

Other race
- Express: 99%
- Non-express: 92%

White
- Express: 97%
- Non-express: 89%

African American/Black
- Express: 94%
- Non-express: 100%

■ Express (n=200)   ■ Non-express (n=202)
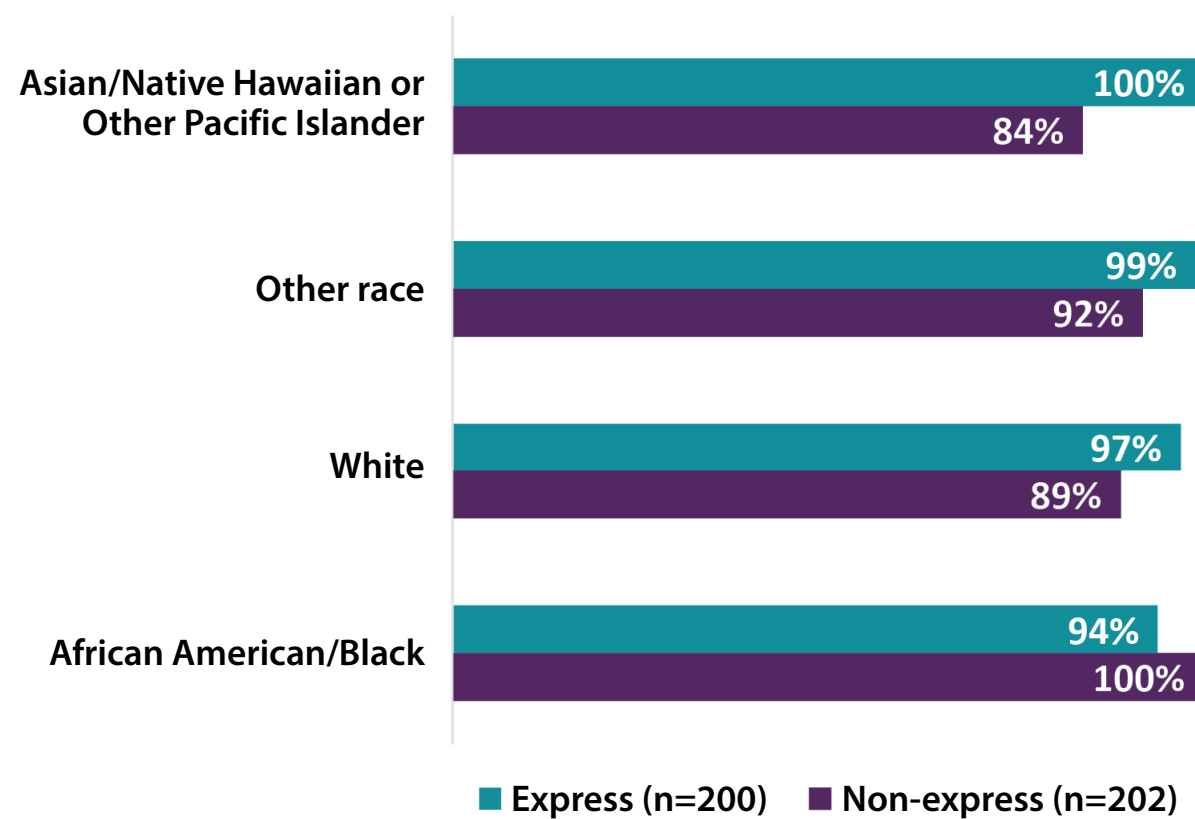
Differences were not statistically significant when adjusted for site location

Figure 37:   A lower proportion of LGBTQ+ patients who received both express and non-express services agreed that the instructions given to self-collect were easy to understand

LGBTQ+
- Express: 96%
- Non-express: 89%

Not LGBTQ+
- Express: 98%
- Non-express: 93%

■ Express (n=260)   ■ Non-express (n=224)
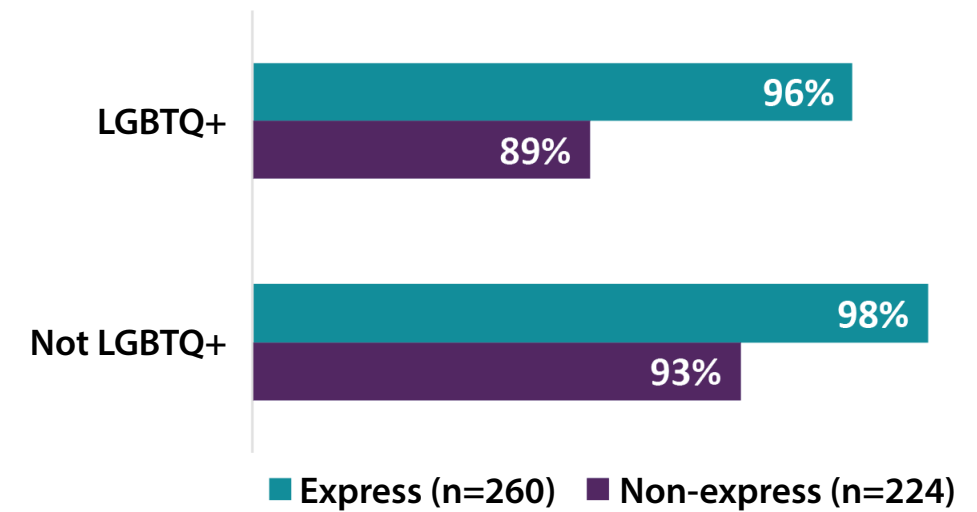
Differences were not statistically significant when adjusted for site location

Most patients were satisfied with clinic environment

Figure 38: **Most express and non-express patients were satisfied with clinic environment**

Express (n=606)   Non-express (n=743)

The clinic is in a convenient location	Express	Non-express
The clinic is in a convenient location	97%	96%
The clinic setting makes me feel comfortable	97%	95%
The clinic hours are convenient for my schedule	94%	92%
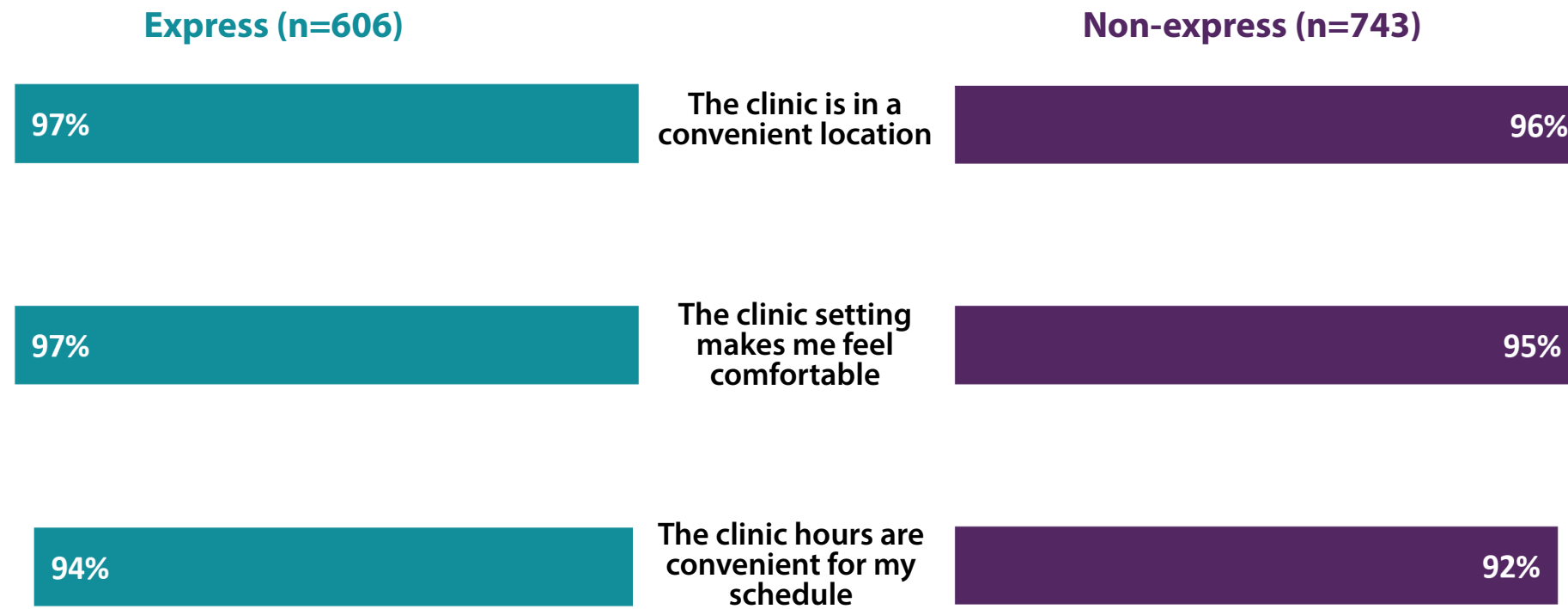
Differences were not statistically significant when adjusted for site location

Most respondents reported high levels of satisfaction with clinic environment, regardless of whether they were express or non-express patients. Nearly all respondents reported that they agreed or strongly agreed that the clinic is in a convenient location (express: 97%; non-express: 96%), the clinic setting makes them feel comfortable (express: 97%, non-express: 95%), and the clinic hours are convenient for their schedule (express: 94%, non-express: 92%).

Satisfaction with clinic environment did not differ significantly between express and non-express patients.

Satisfaction with clinic location and hours was lowest among non-express patients who were Asian/Native Hawaiian or Other Pacific Islander or LGBTQ+

Figure 39: The proportion of Asian/Native Hawaiian or Other Pacific Islander patients who agreed that the clinic is in a convenient location was higher among express than non-express patients

African American/Black
- Express: 98%
- Non-express: 99%

Asian/Native Hawaiian or Other Pacific Islander
- Express: 97%
- Non-express: 84%

Other Race
- Express: 97%
- Non-express: 99%

White
- Express: 97%
- Non-express: 96%

■ Express (n=355) ■ Non-express (n=401)
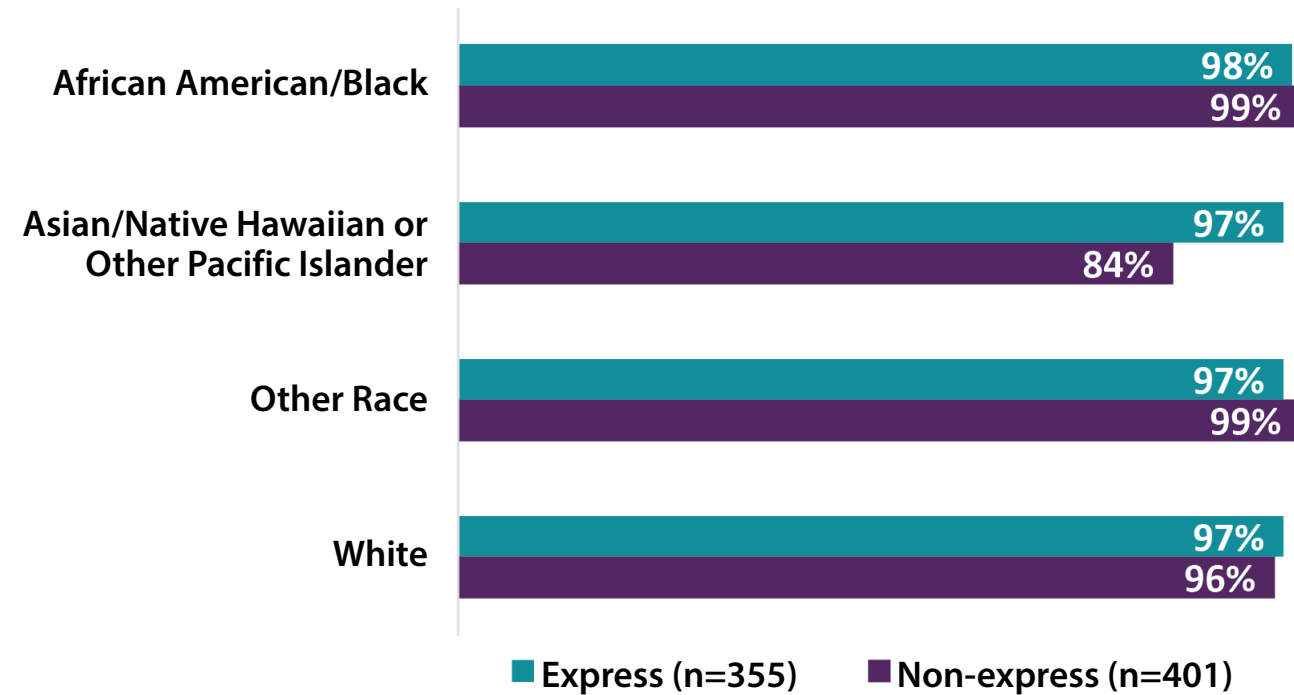
Differences were not statistically significant when adjusted for site location

Figure 40: The proportion of LGBTQ+ patients who agreed that the clinic hours are convenient for their schedules was higher among express than non-express patients

Not LGBTQ+
- Express: 92%
- Non-express: 94%

LGBTQ+
- Express: 93%
- Non-express: 87%

■ Express (n=339) ■ Non-express (n=436)
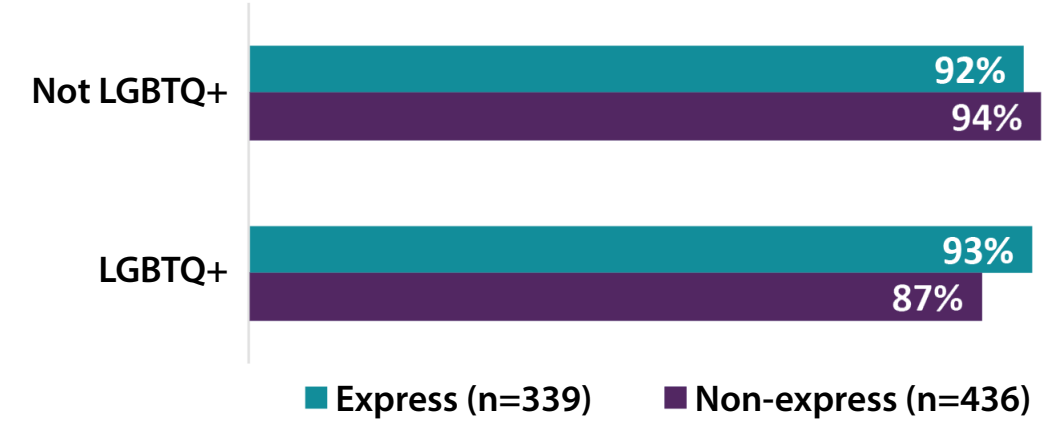
Differences were not statistically significant when adjusted for site location

What factors do patients consider when choosing a clinic to receive testing?

High quality care is the top patient consideration when choosing a clinic to receive STI testing

Patients most frequently reported that high quality care, being treated with respect, confidentiality, wait time, and cost were their top considerations in choosing a clinic to receive testing.

Respondents reported that the most important considerations when selecting a clinic to receive testing were high quality care (38%, n=527), being treated with respect (36%, n=500), confidentiality (32%, n=442), wait time (29%, n=405), and cost (28%, n=396). Additional considerations included cleanliness, convenient hours, fast turnaround time of results, safety, and clinic location.

Among a **subgroup of 170** respondents who selected only one most important consideration, high quality care remained at the top (24%, n=40), while availability of walk-in services (14%, n=23) and clinic location (12%, n=23) emerged as important considerations. Other considerations included being treated with respect, cost, confidentiality, and fast turnaround time.

Top 5 patient considerations when choosing a clinic to receive testing

1 High quality care

2 Being treated with respect

3 Confidentiality

4 Wait time

5 Cost

Figure 41: Nearly half of patients reported that they prefer to receive testing results by phone

By phone (49%)

Electronically through a patient portal (34%)

By text message (34%)

Preferences did not differ by demographic characteristics, including age, N=391

What can be improved about express visits?

Offering longer hours was the top suggestion for improving clinic services

Top 5 patient suggestions for improving clinic services were…

1 Offer longer hours (12%)

2 Improve facilities (i.e., clean, remodel, more bathroooms) (9%)

3 Reduce wait time (8%)

4 Hire more staff, especially staff that reflects patient population (6%)

5 Better communication skills among staff (4.5%)

Patients most frequently reported offering longer hours, improving facilities, reducing wait time, hiring more (and more diverse) staff, and improving communication among staff as suggestions for improving clinic services

*Please see **Tables 55 through 79** in the **Technical Appendix** for more details about patient satisfaction among express and non-express patients.*

COST

What does it cost to administer express services?

Among participating sites, the estimated cost of express services has a range between $245,331 and $1,078,876 annually, including personnel and lab costs. Personnel made up the largest portion of total cost across the sites. Ranging between $143,349 and $831,248 annually.

Figure 42: **Estimated annual costs across 13 sites in seven U.S. cities, during a six-month period from 2018–2019**

Cost category	Cost description	Range in cost
Overall	Annual cost	$245,331–$1,078,876
	Cost per visit	**$193–$581**
	Cost per case diagnosed	$2,129–$8,762
Personnel	Total cost	$143,349–$831,248
	Cost per visit	**$97–$453**
	Cost per case diagnosed	$1,013–$5,279
Lab	Total cost	$33,250–$201,374
	Cost per visit	**$17–$139**
	Cost per case diagnosed	$212–$3,146

Dollar values are rounded to the nearest whole number.

CDC collected cost information from 13 sites in seven U.S. cities, during a six-month period between May 2018 and December 2019. The estimated annual cost across the sites was between $245,331 and $1,078,876. The estimated cost per visit ranged $193–$581, and the estimated median cost per case diagnosed was $2,129–$8,762. Annually, sites spent between $143,349 and $831,248 on personnel costs and between $33,250 and $201,374 on laboratory costs. The estimated range of personnel cost was $97–$453 per visit, and the estimated range of laboratory cost was $17–$139 per visit. The estimated range of personnel and laboratory costs per case diagnosed were $1,013–$5,279 and $212–$3,146, respectively. The range varied greatly among sites.

Personnel costs ranged between 38 and 78 percent of the total cost of express service implementation.

Figure 43: **Annual cost of express services by site and cost**
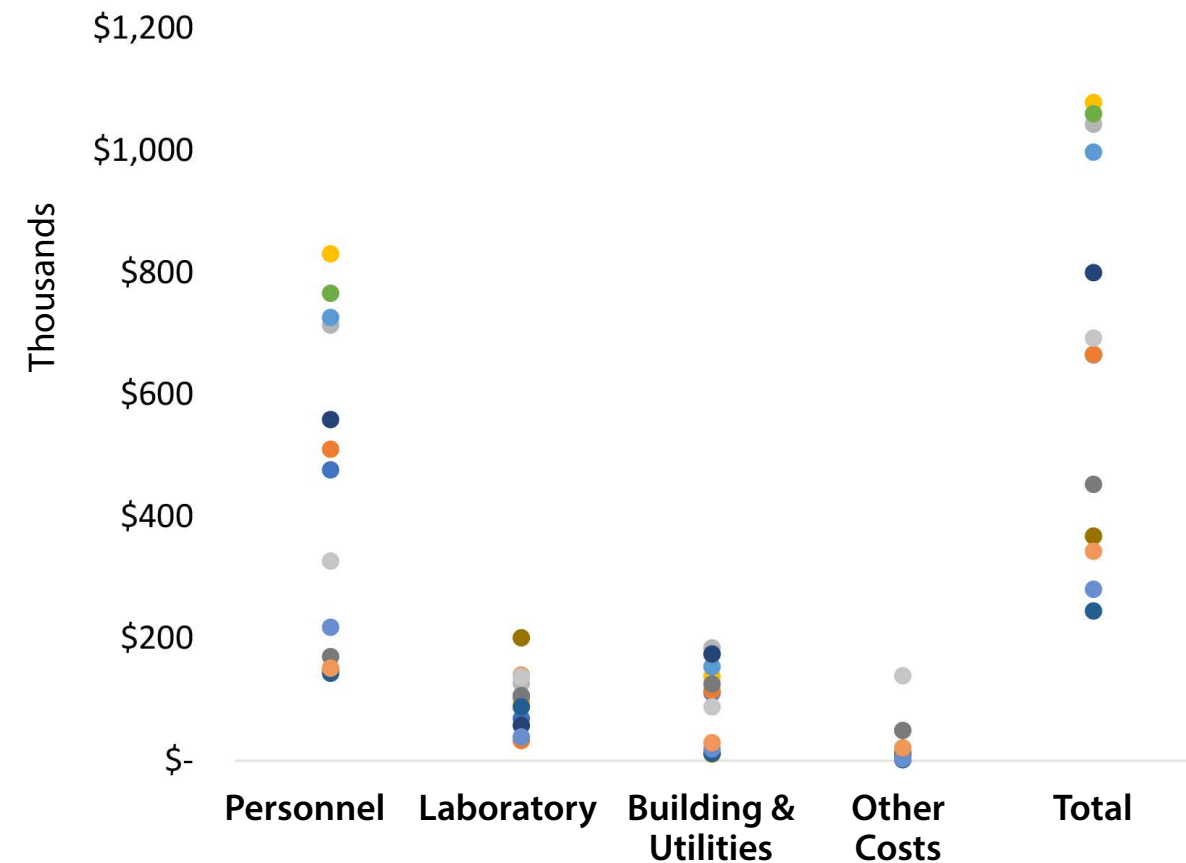
The major cost driver of express services was personnel. Personnel and laboratory costs accounted for 38% to 78% and 5% to 55% of the total cost of express service implementation, respectively. The remaining 23% to 33% of the total cost consisted of building use and utilities, security, and other costs. Building use and utilities and security represented between 3 and 28 percent of the total cost. The range in costs by category across sites was large. Personnel has the largest spread in the total cost of express services.

What is the estimated cost per express visit?

The total cost per express visit was between $193 and $581. Across sites, the cost per case diagnosed was between 5 and 37 times the cost per express visit.

Figure 44: Cost per express visit by site and cost category
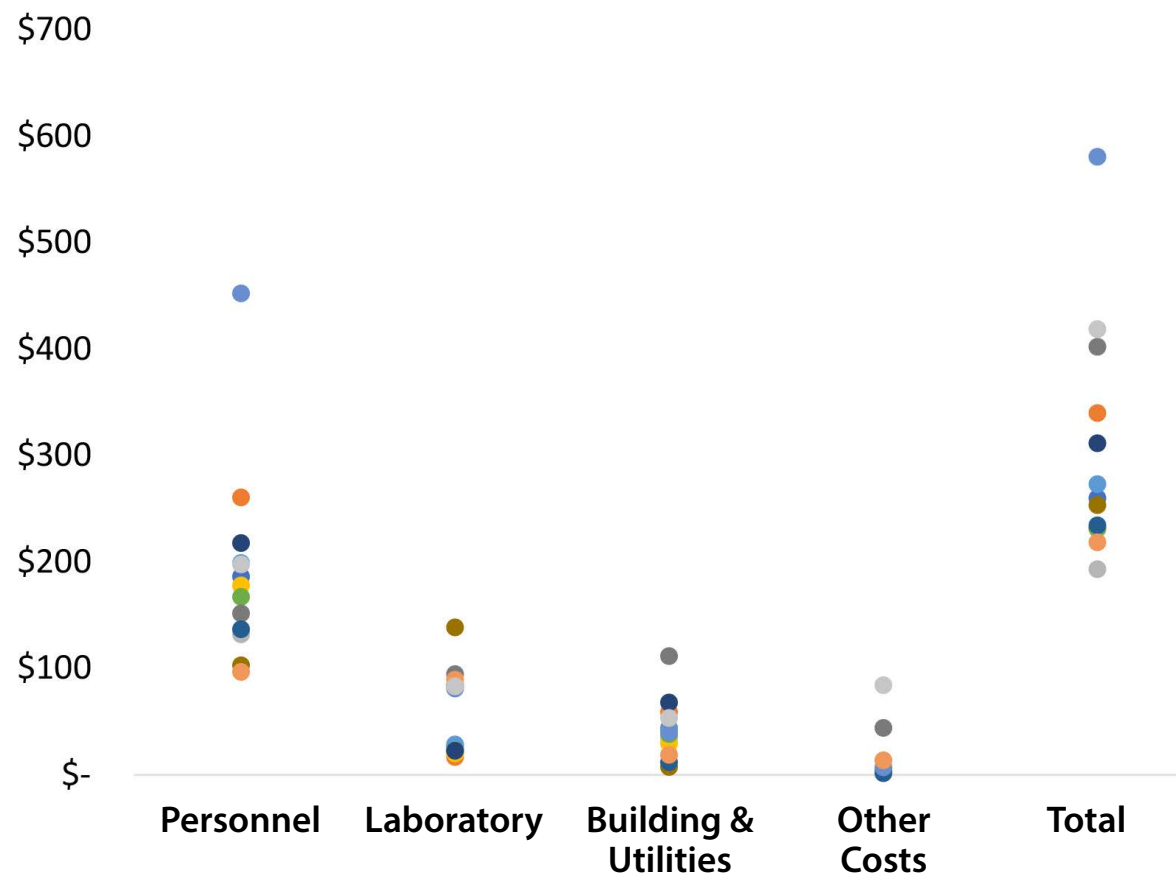
Across sites, the estimated total cost per express visit was between $193 and $581. Personnel and laboratory costs accounted for most of the cost, $97–$453 and $17–$139, respectively; followed by building use and utilities ($8–$112), and other costs ($1–$84).

Figure 45: Cost per case diagnosed by cost categories
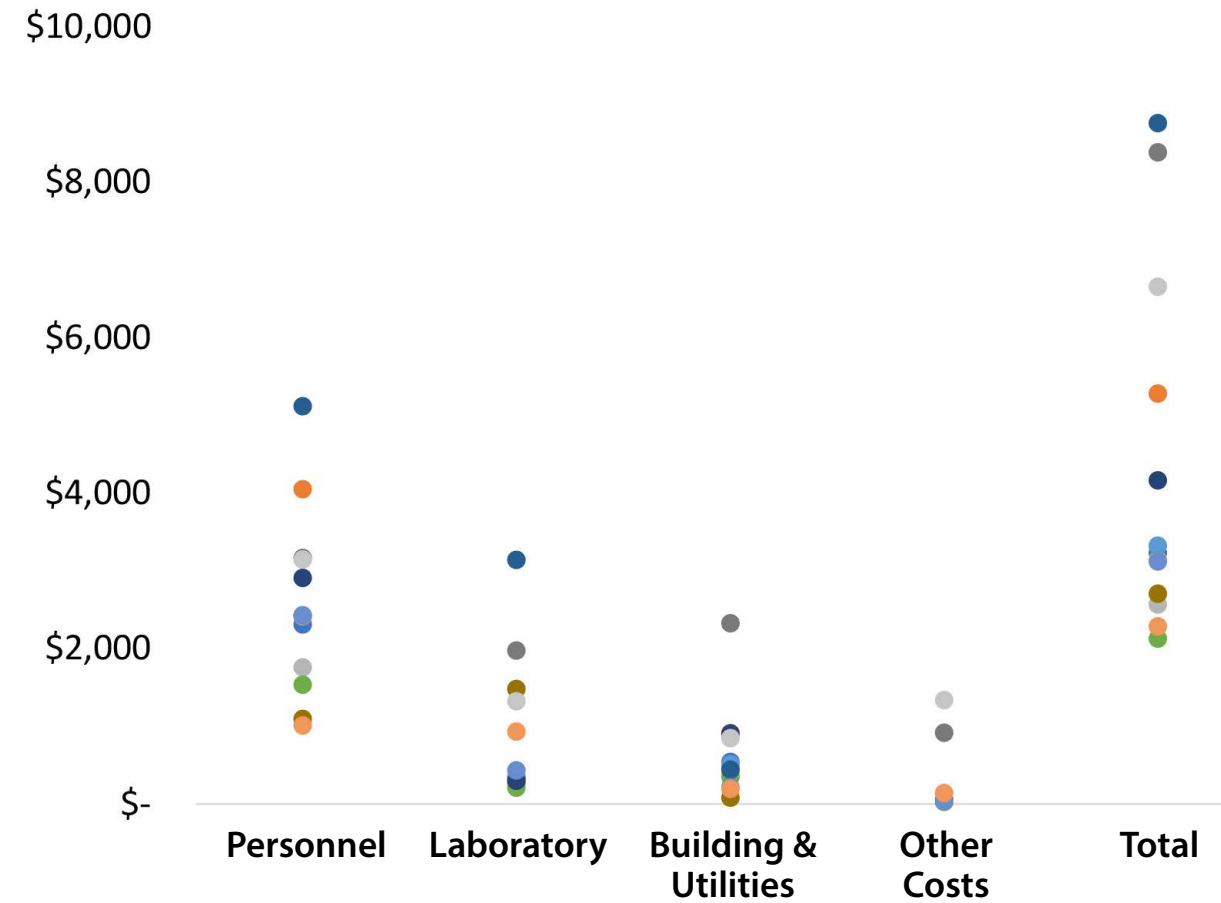
When comparing cost per visit and cost per case diagnosed, the cost per case diagnosed ranged between 5 and 37 times the cost per visit. Moreover, the cost per case diagnosed varied widely across sites, ranging from $2,129 to $8,762. Across sites, personnel represented most of the variability on cost per case diagnosed ($1,013–$5,120), with the remaining shared among laboratory ($212–$3,146), building use and utilities ($81–$2,328), and other costs ($28–$1,341).

What were the largest cost drivers within the cost categories?

Figure 46: Proportion of annual cost for express services by site and cost category
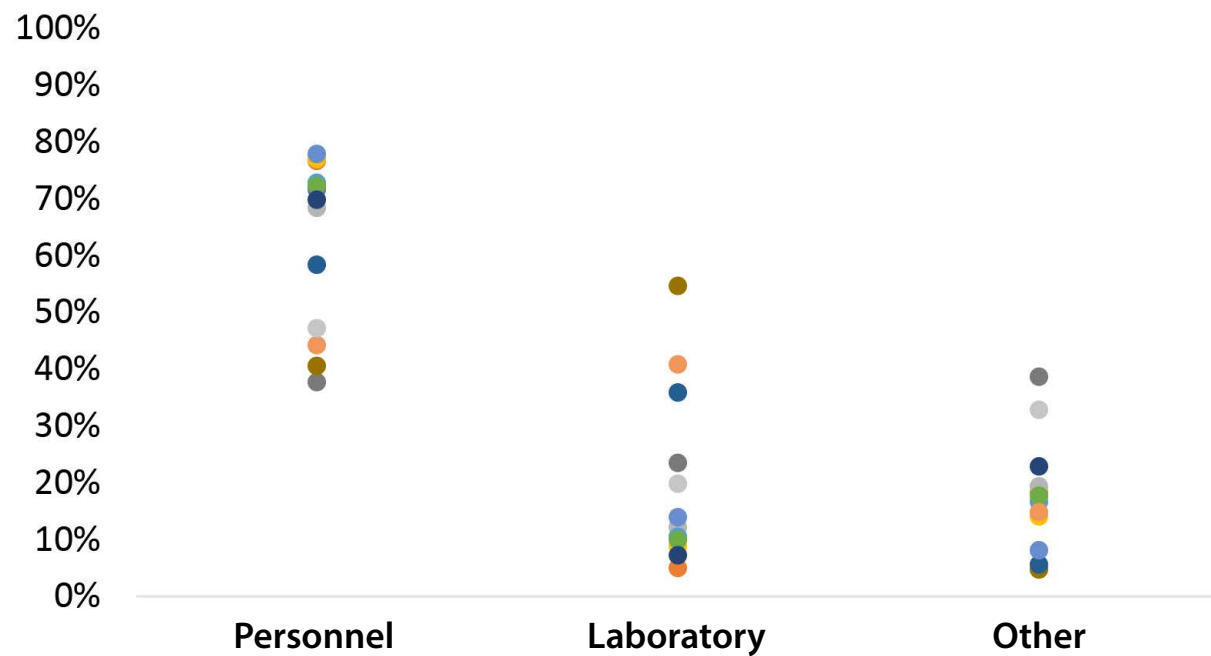
Personnel costs represented a range from 38% to 78% across sites. Laboratory costs annual cost ranged from 5% to 55% across sites, and other costs ranged from 5% to 39% across sites.

Figure 47: Proportion of personnel costs by site and type of personnel
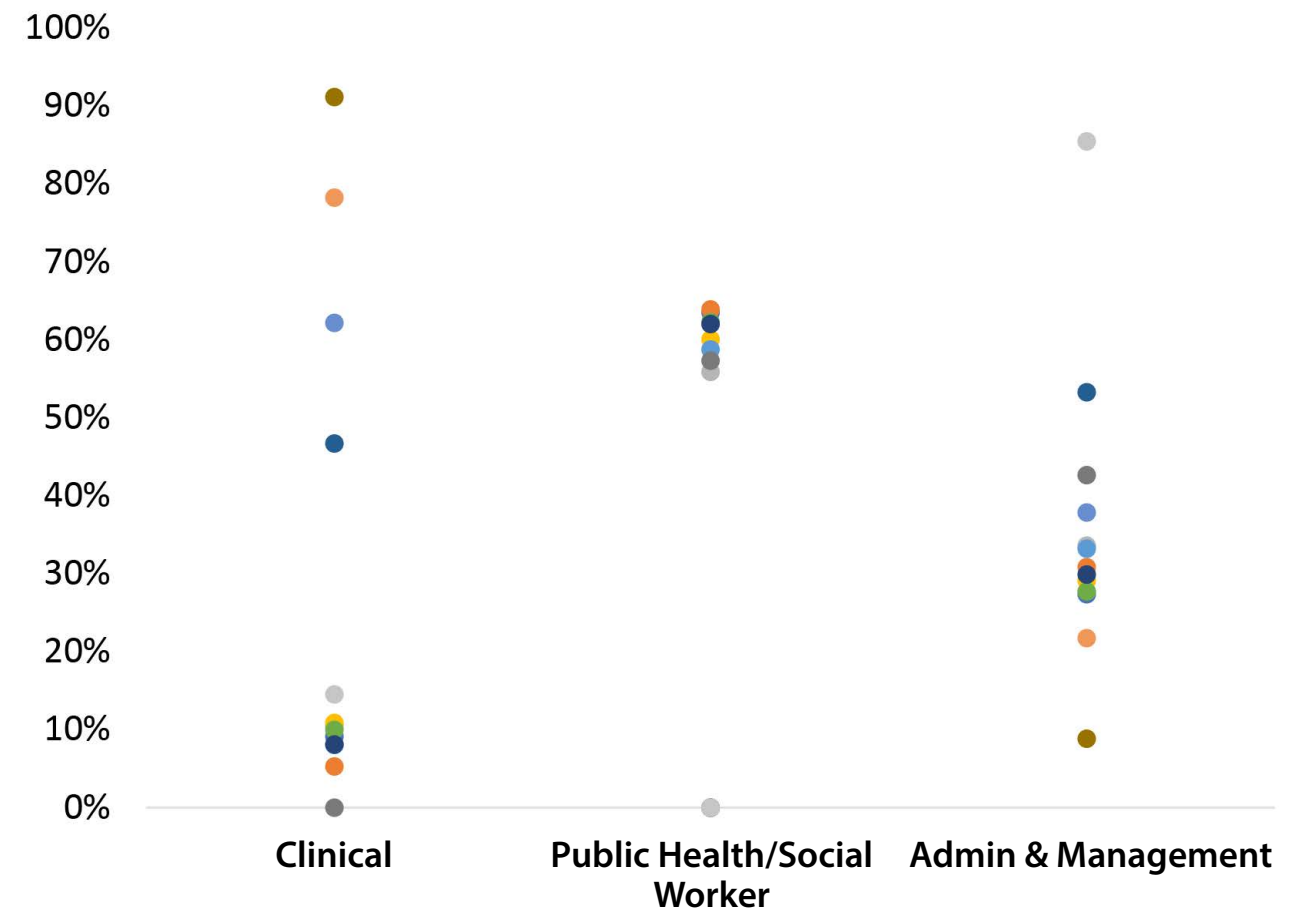
Among types of personnel, public health assistants, social workers, and navigators clustered tightly on the personnel cost, followed by administration and management. The range of public health assistants, social workers, and navigators was between 0% and 64%. Clinical personnel costs ranged from 0% to 91% of personnel cost. Finally, administration and management represented a considerable part of the personnel cost, ranging from 9% to 86% across sites.

Figure 48: **Annual cost of programmatic activities by site and programmatic activity**
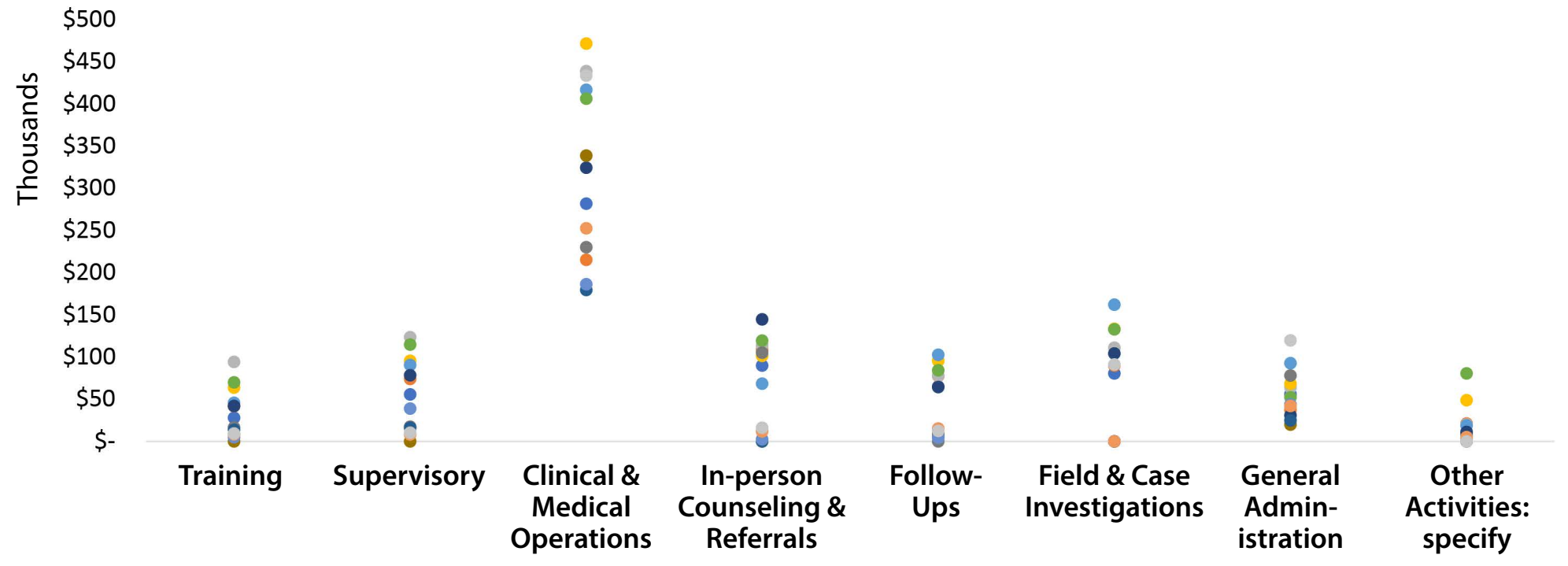
The annual cost of clinical and medical operations ranged from $179,376 to $471,518 across sites. Clinical and medical operations costs were the largest proportion of programmatic costs across sites. In-person counseling and referrals, ranged from $0 to $144,719 across sites, followed by field and case investigations, with an annual cost ranging from $0 to $162,037 across sites. The rest of the programmatic costs was devoted to training, supervisory, follow-ups, general administration, and other activities.

Figure 49: **Proportion of programmatic costs by site and type of programmatic cost**
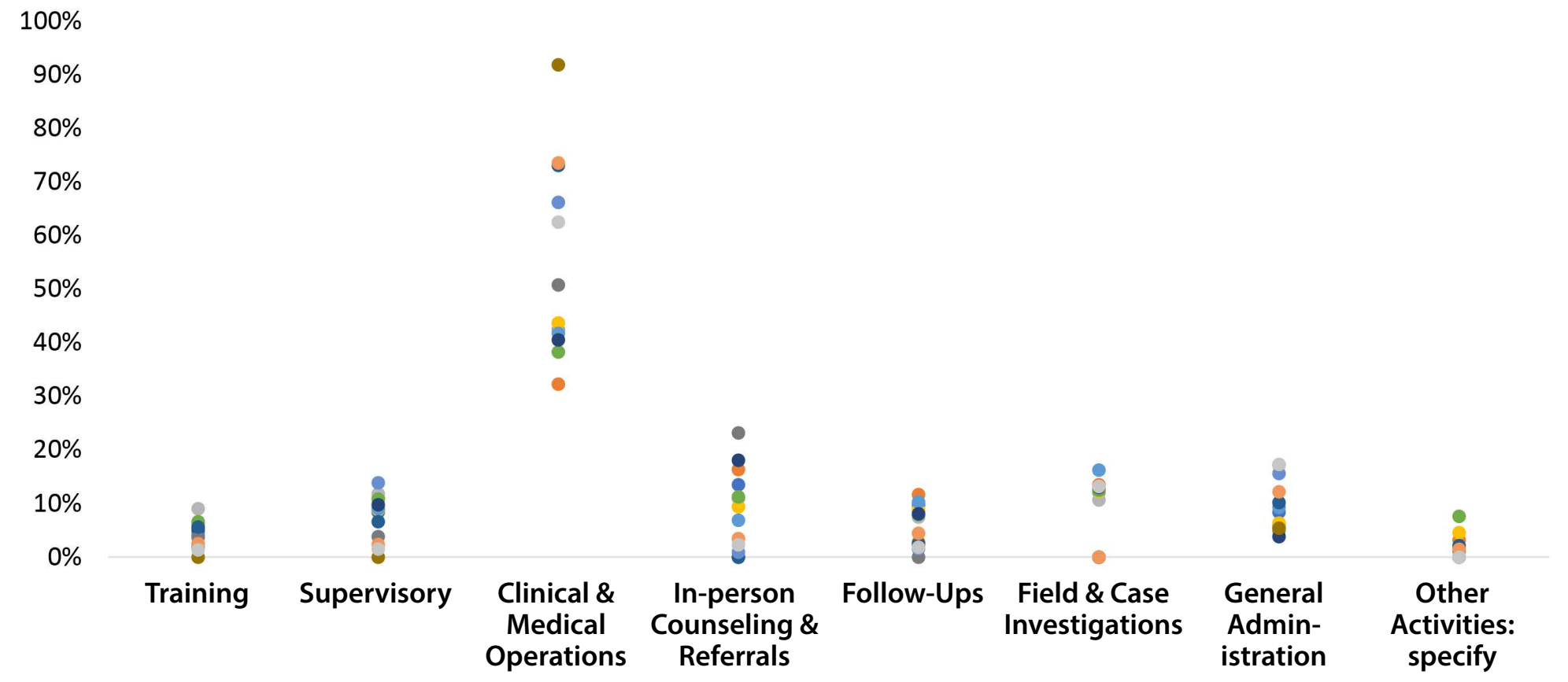
Clinical and medical operations was the major cost driver within the programmatic cost category, with a share of total programmatic cost ranging from 32% to 92% across sites. The range of the proportions of the other programmatic activities costs was as follows: related to training (0%–9%), supervisory (0%–14%), in-person counseling and referrals (0%–23%), follow-ups (0%–12%), field and case investigations (0%–16%), general administration (4%–17%), and other activities (0%–8%).

Does the number of STI cases diagnosed influence the cost per case?

As the number of visits and STI cases diagnosed increased, the cost per visit and case diagnosed decreased.

Figure 50: Cost per express visit by site and number of visits

y = -0.0835x + 408.91
R² = 0.3677
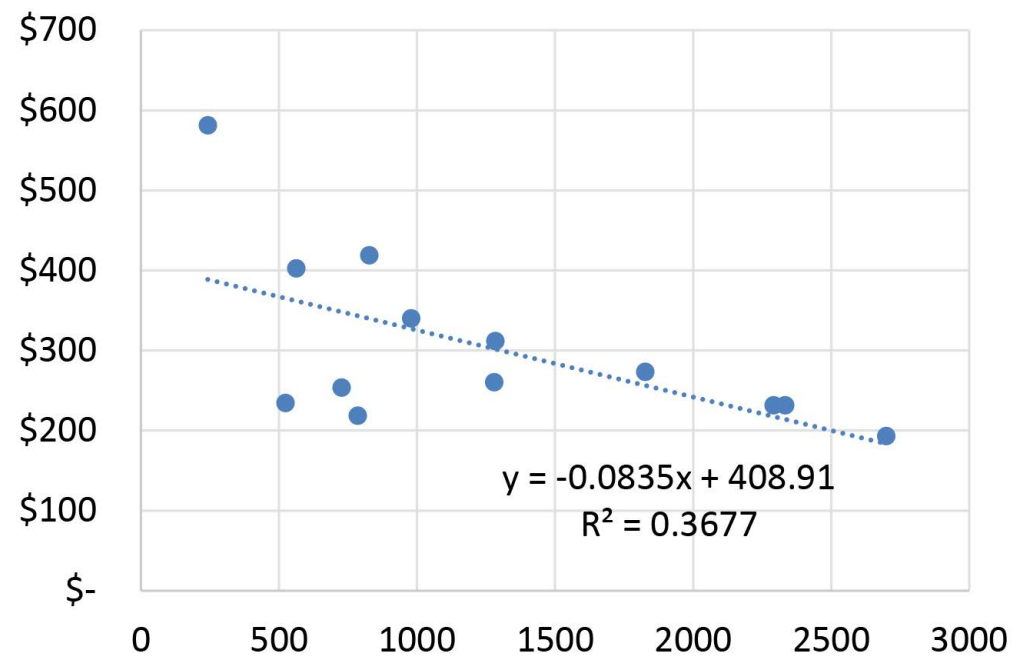
There was a negative relationship between the number of express visits and the cost per express visit. The cost per visit ranged from $193 to $581 across sites. The cost per visit was lower for sites with larger numbers of visits. On average, the per visit cost decreased by approximately 8 cents for every additional visit.

Figure 51: Cost per STI case diagnosed by site and number of STI cases diagnosed

y = -21.16x + 6434.4
R² = 0.4426
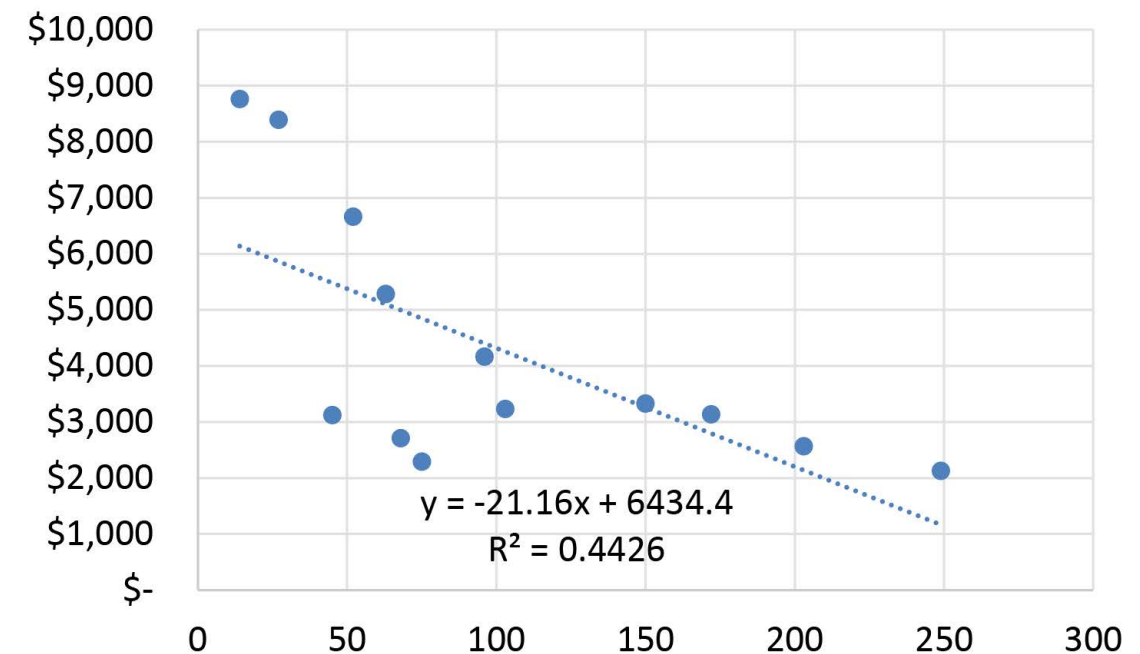
There was also a negative relationship between the number of STI cases diagnosed and the cost per STI case diagnosed. The cost per STI case diagnosed ranged from $2,129 to $8,762 across sites. The cost per STI case diagnosed decreased, on average, by $21 for every additional STI case diagnosed.

LESSONS LEARNED

STI express services complement other clinical services and may be implemented across diverse settings and via multiple strategies

The sites demonstrate that STI express services can be implemented across the U.S., within a variety of settings and through various approaches. Sites served a wide range of patients and had varying capacity, with the number of visits per year ranging from under 9,000 to nearly 90,000 across sites. Each site had different priority populations and different triage processes that reflected their priority populations. The only characteristic that all sites had in common was that patients had to be asymptomatic to be eligible for express services. Most, but not all, required that patients had no recent exposure to an STI, and only two required that patients were not a priority population and were not interested in receiving PrEP or PEP.

Despite the variety of settings and approaches, STI express services attracted high proportions of priority populations and new patients. Patients reported high levels of satisfaction with express services across sites. These findings demonstrate that express services can be viewed as a complement to other clinical services that clinics provide to support their patients.

Sites implement STI express services for a variety of reasons

Sites shared varied rationale for implementing STI express services and designing STI express models. Sites' primary reasons for implementing STI express services were desires to increase staff capacity for symptomatic patients, reduce patient wait time, increase patient satisfaction, reduce the number of patients turned away, and, ultimately, serve more patients. Key reasons that sites selected specific STI express models included funding considerations/payment models, physical space constraints, staff capacity and satisfactions, and technological capacity.

Sites that offer STI express services use a variety of data systems and measures

Sites used various data systems including Centricity, Cerner, Epic, Insight, Matrix, and PTBMIS. They also used varying registration methods, including paper and electronic registration through systems, including Epic, Insight, HealthVana, Matrix/Televox, and RedCap, and collected varying patient data, depending on what is most relevant and important for their clinics. Differences in data systems and indicators made it challenging to align and assess findings across sites. However, most sites collected some common measures related to patient characteristics, capacity, testing, treatment, and cost. This demonstrated that, despite differences in data systems and data collection, there are ways to aggregate STI express services data to reveal high-level findings about express services.

Personnel costs are the main driver of total cost of express services

The estimated annual cost across express STI sites ranged between $245,331 and $1,078,876. Most of the costs across sites were allocated to personnel ($143,349–$831,248), followed by laboratory expenses ($33,250–$201,374). The estimated cost per express visit was between $193 and $581, and the estimated cost per case diagnosed was between $2,129 and $8,762. Across sites, personnel cost dedicated to public health assistants, social workers, and navigators ranged between 0 to 64 percent, while the administrative cost ranged between 32% to 92% was dedicated to clinical and medical operations.

STI express services offer increased opportunities for STI testing and PrEP consultation

STI and HIV testing were higher among express patients compared with non-express patients, with express patients receiving packaged testing (i.e., testing for chlamydia, gonorrhea, syphilis, and HIV vs. testing for just one STI during the visit) more frequently than non-express patients. STI positivity was lower among express patients, compared with non-express patients for all STIs. On average, the number of visits per day across sites increased after STI express service implementation, and express visits were shorter than non-express visits. Express services also did not greatly influence time to treatment. With increased testing and reduced appointment time, findings suggest that implementing express services is an effective way to reduce the number of "worried well" patients who see providers, while increasing capacity for patient visits and opportunities to receive STI testing and treatment among priority populations.

Additionally, although most sites did not provide data on PrEP and available PrEP data were limited, preliminary findings suggest that express patients received PrEP counseling more frequently than non-express patients. Through increasing opportunities for PrEP counseling, express service implementation is an innovative approach that may support ending the epidemic strategies.

LIMITATIONS

Location

Differences in sites meant that there were differences in patient populations, models of express service implementation, and data systems and collection, among others. For example, while all sites provided STI express services to asymptomatic patients, there were differences in how patients were triaged to express services, when express services were offered, who was eligible for express services, and patient flow. Sites were located in different parts of the country with varied capacity and experience in implementing express services for different periods of time. All regressions were adjusted by site to account for some of these differences in location. However, adjusting analyses may not have addressed all differences related to site location. Sites also provided various reasons for selecting STI express models. Differences in STI express models were reflective of each site's needs and constraints, which may have influenced evaluation findings.

History

Some sites provided data from before implementation of STI express services so that Cardea could assess changes in patient characteristics and capacity pre- and post-express. Data from different time periods were subject to different policy and clinic environments, including, but not limited to, changes to intake forms, data collection processes, and quality assurance processes, which may have influenced findings. For instance, findings suggested that, in the express time period, more patients identified as a transgender persons, non-binary, genderqueer, or gender non-conforming compared with the pre-express time period. It is possible that these changes were due to changes in intake forms that allowed patients to select from more gender identity options in the express time period. National and state policy may have also influenced findings related to insurance status, with more patients in the express time period having insurance compared with the pre-express time period.

Differences defining "non-express" across sites

Although all sites provided non-express visit data as a comparison group for this evaluation, some sites provided a specific subset of non-express data that was not, or may not have been, representative of all non-express visits that occurred during the project period. For example, one site restricted non-express data to visits among patients who were eligible for, but opted out of, express services. Two sites that commonly triage patients to more than two types of visits excluded data among visits that the site did not classify specifically as "express" or "clinician." These differences in non-express comparison data across sites make it challenging to generalize comparison group findings to a specific type of non-express visit.

Self-report biases

Self-reported data on sexual behavior and drug use and on patient satisfaction with health services can be subject to self-report and social desirability biases, with patients under-reporting information that they believe may be stigmatized and over-reporting satisfaction.[1] For example, patients commonly underreport drug use and sexual risk behaviors due to fear of stigma, and over report satisfaction with health services. Therefore, results may underestimate the proportion of some priority populations who received both express and non-express services, and overestimates patient satisfaction with express and non-express services.

[1] Althubaiti A. Information bias in health research: definition, pitfalls, and adjustment methods. Journal of multidisciplinary healthcare. 2016;9:211.

Cost data availability, quality, and utility

Cost data varied in availability and quality across sites. Two sites did not have information on laboratory costs. CDC estimated their laboratory costs using the per visit average cost from other sites. One site only provided information on personnel cost. CDC worked with the site to estimate the rest of the cost data using information obtained at the site and cost estimates from other sites. These data limitations and ranges across sites are important to keep in mind when considering how to scale up programs and/or budget for new programs. Additional cost studies are underway to estimate the cost-effectiveness of express clinics compared to other clinics and the range of costs for STI services across different modalities.

CONSIDERATIONS & FUTURE DIRECTIONS

Explore strategies to reach patients from priority populations

Some priority populations were not as well represented through express services compared with non-express services. These included young people, those without health insurance, and those engaging in transactional sex, who were likely under-reported across both express and non-express patients. In the satisfaction surveys, patients suggested that incorporating more diverse staff who better reflect the characteristics of those they serve would be helpful for improving patient experiences. Patients also suggested that extending clinic hours outside of standard business hours would support increased opportunities for STI testing among those who are unable to come to the clinic during weekdays.

Strive to reduce appointment and wait time

On average, express visits were more than one hour long. Although non-express visits were more than twice as long and visit time varied by site, express visits were not particularly short. Patient satisfaction survey responses mirrored this finding, with "reducing wait time" as one of the top five recommendations for improving their satisfaction. Clinics may consider conducting time or clinic efficiency studies to better understand bottlenecks in patient flow and implementing procedures to streamline visits, based on where and why bottlenecks occur. Shorter appointment and wait time may support increased clinic capacity and improve patient satisfaction.
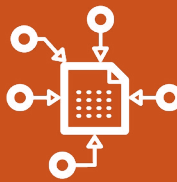
Harmonize data collection

Through this multi-site evaluation, the Collaborative shared data collection forms and processes so that Cardea was able to develop a single data dictionary to assess commonly collected indicators across sites. Developing a streamlined data dictionary and evaluation framework for sites implementing STI express services may provide useful guidance regarding key indicators and ways to capture these indicators. Harmonizing data collection practices may allow clinics to improve their use of data for program decision-making and support future multi-site evaluations and research on STI Express services. The *STI Express Services Data Collaborative Data Dictionary*, the *STI Express Services Evaluation Framework*, and the *Express Services Implementation Guide* are included as appendices to this report.

Increase efforts to support STI treatment, PrEP, and EPT provision

STI treatment within 14 days of testing was lower among express patients, compared with non-express patients. Fewer express patients received treatment at their visit, which is not surprising given that express patients generally have no symptoms and do not see a clinician who could order treatment. PrEP and EPT provision were also low among express patients, in part due to triaging patients who are interested in PrEP to non-express services. Developing or refining processes to more quickly reach and connect patients to treatment after their express visits, along with integrating PrEP and EPT into express services, when possible, may reduce transmission of STIs, including HIV, and support ending the epidemic strategies.

If capacity allows, increase the number of visits to reduce the per visit cost

In this evaluation, the cost per visit and cost per case diagnosed decreased as the number of visits and number of STI cases diagnosed increased. This suggests that express services can be an important part of the landscape of sexual health services, with thoughtful attention to outreach and patient volume. This evaluation could be used to inform future STI program planning in the U.S. and to generate recommendations on resources to target and scale express STI program accordingly.

TECHNICAL APPENDIX

Appendix A. Acronyms

aOR — adjusted odds ratio

CDC — Centers for Disease Control and Prevention

CI — confidence interval

EPT — expedited partner therapy

HCV — hepatitis C virus

HIV — human immunodeficiency virus

HPV — human papillomavirus

LARC — long acting reversible contraception

LGBTQ+ — lesbian, gay, bisexual, transgender persons, queer, and others who do not identify as straight/heterosexual

MSM — men who have sex with men

NACCHO — National Association of County & City Health Officials

NPS — net promoter score

NYC — New York City

OR — odds ratio

PEP — post-exposure prophylaxis

PrEP — pre-exposure prophylaxis

SD — standard deviation

STD — sexually transmitted disease

STI — sexually transmitted infection

Appendix B. Glossary of Terms

Appointment time — The length of total appointment time is the difference between the patient's arrival to and departure from the clinic.

Express time period — The time period in which express was implemented. This time period includes all visit types: express, non-express, and other.

High-risk drug use — Patients who reported using cocaine, methamphetamine, or heroin.

Most recent visit — The most recent patient visit that a clinic recorded during the project time period. If data were not available for the most recent patient visit, but were previously recorded for that patient, then the project team included data from the most recent prior visit for which data were available to account for missing data and provide a more complete assessment of patient characteristics and experiences. If the project team determined that the most recent visit was a follow-up visit, then the team assessed testing and positivity using data from the visit prior to the most recent visit.

Net promoter score — Net promoter scores (NPS) help indicate how likely a survey respondent is to recommend a service or experience to someone they know. A NPS is calculated by subtracting the percent of detractors from the percent of promotors. For this report, promotors are those who selected 9-–10, and detractors are those who selected 1-6 on a 10-point scale in response to the question, "On a scale from 1 to 10, how likely are you to recommend testing at this clinic to someone you know?"

Pre-express time period — The time period before express was implemented. Four sites provided pre-express time period data.

Time to result notification — The difference in days between the date that a patient received STI testing and the date that the clinic either posted testing results or notified patients of testing results, depending on which dates were collected and recorded.

Time to treatment — The difference in days between the date that a patient received STI testing and the date that the clinic recorded treatment for that patient, if the patient tested positive for an STI.

Appendix C. Data Collaborative Evaluation Framework

Patient Characteristics	Metrics	Core Variables	Optional Variables
What are the characteristics of patients receiving express services? How are express service patients the same or different from the general patient population? Do express services attract new patients to the clinic from priority populations? How often do patients receive express services?	Patient demographics Proportion of patients who are new patients to clinic Average number of express visits per patient Average length of time between visit	Unique identifier Age/date of birth Zip code Gender identity Race Ethnicity Language Sexual behavior New patient	Sexual identity/orientation Sex assigned at birth Health insurance Income (billing data) Census tract or other geographic data Additional characteristics (substance use, housing, etc.)
Clinic Capacity & Appointment Time	**Metrics**	**Core Variables**	**Optional Variables**
What effect do express services have on a clinic's capacity to see patients? What effect do express services have on appointment time? What proportion of patients are accurately triaged for appointments?	Number of visits (per day, per staff) Number unique patients Average length of time of appointments Number of patients turned away Average patient wait time Proportion of patients accurately routed to express services	Date of visit Time of arrival for visit Visit type (express, clinician, other) Time patient leaves clinic	Express eligibility Time of phlebotomy Patient turnaway data
Testing & Treatment	**Metrics**	**Core Variables**	**Optional Variables**
How are positivity rates the same or different from the general clinic population? What effect do express services have on days to treatment initiation? What effect do express services have on rates of treatment follow up? Are express visit patients provided EPT at follow up? What effect do express services have on PrEP uptake in a clinic?	Positivity rates, by type of STI Days to treatment initiation Proportion of patients with positive test results who return for treatment Days to notification of positive test result Proportion of patients provided EPT at follow up Proportion of express patients who initiate PrEP	Date result posted from the lab Tests ordered, by type of STI Test result Follow up appointment date Date treatment prescribed	Time of consultation/rapid results notification Date patient notified of positive result Number of contact attempts Follow up appointment scheduled EPT provided Currently on PrEP PrEP counseling conducted Interested in PrEP PrEP follow up appointment scheduled PrEP initiated

Patient Satisfaction	Metrics	Core Variables	Optional Variables
What factors are patients looking for in an express visit? To what extent are patients satisfied with express services? To what extent are patients comfortable with the staff and clinic environment? What can be improved about express visits?	Proportion of patients that are satisfied with the visit, staff, clinic environment and services they receive Proportion of patients that feel safe and respected during the visit Proportion of patients likely to recommend clinic to someone they know	I am satisfied with my visit today Satisfaction Likert grid: wait time, experience with staff, services received, clinic hours, clinic look and feel I had confidence in the health care professionals I saw during my visit I felt cared for during my visit My questions were answered during my visit What is most important to you when you choose a location to receive testing? Cost, wait time, being treated with respect, confidentiality, convenient hours, high quality care, location of clinic, fast turnaround of results, safety, other On a scale from 0 to 10, how likely are you to recommend testing at this clinic to someone you know What can we do to improve our services? Please share any additional comments Demographic variables- age, race/ethnicity, gender	Additional satisfaction questions: kiosk/intake process, amount of time with staff I felt comfortable self-collecting samples Instructions during my visit were easy to understand How did you find out about this site/Why did you come to this site to receive testing? What additional services do you wish you had received? Have you received testing at this clinic before? [If Yes] why do you choose to receive testing at this clinic? Were you given information about why you needed certain tests in a way that you could easily understand? How do you prefer to receive testing results? Electronically in a patient portal; phone call; text message; other Staff made me feel respected Did you have enough say about the services you received today?
Economic Evaluation	Metrics	Cost Analysis	Cost Effectiveness
What are the costs associated with establishing and maintaining express services in various STI program settings? Are express services cost effective?	Cost per patient Cost per case detected/treated	Number of patients Tests ordered, by type of STI Number of positive tests Number of patients prescribed treatment Average appointment time	Clinician visit costs and outcomes Cases averted Costs averted

Appendix D. Data Checklist

Evaluation Topic	Field Name	Express	Clinician	Additional Comparison Group	Field Name	Express	Clinician	Additional Comparison Group
Core Variables					**Optional Variables**			
Patient Characteristics	Unique Identifier				Sexual identity/orientation			
	Age/DOB				Gender at birth			
	Zip Code				Health insurance			
	Gender Identity				Income (billing data)			
	Sexual History (last 12 months)				Census tract or other geographic data			
					Additional characteristics [substance use (heroine, cocaine, methamphetamine), housing, transactional sex (yes/no), etc]			
	Extragenital exposure (yes/no) (last 30 days or last sex?)							
	Number of sexual partners (last 12 months)							
	Sex of sex partners (last 12 months)							
	Race							
	Ethnicity							
	Language							
	New patient (y/n)							
Capacity and Efficiency	Date of visit				Eligible for express (y/n)			
	Time of arrival for visit				Time of phlebotomy			
	Visit type (express, clinician, other)				Time of consultation			
	Tests ordered, by type of STI (Chlamydia, gonorrhea, syphilis, HIV)				*Patient Turnaway Data*			
	Time patient leaves clinic/end of appt							
Treatment & PrEP	Date result posted from lab				Date patient notified of positive result			
	Test result (positive/negative), by type of STI (Chlamydia, gonorrhea, syphilis, HIV)				Number contact attempts			
	Follow up appointment/return visit date				Follow up appointment scheduled (y/n)			
	Date treatment prescribed				Date treatment completed			
					EPT provided during follow up (y/n)			
					Currently taking PrEP (y/n)			
					PrEP counseling conducted (y/n)			
					Interested in PrEP (y/n)			
					PrEP follow up appointment scheduled (y/n)			
					PrEP initiated (y/n)			
Patient Satisfaction	Overall, how satisfied were you with your visit today?	N/A	N/A		Additional satisfaction questions: Kiosk/intake process, amount of time with staff	N/A	N/A	
	Satisfaction likert grid [*wait time, experience with staff, services received, clinic hours, clinic look and feel*]	N/A	N/A		I felt comfortable self-collecting samples	N/A	N/A	
	I had confidence in the health care professionals I saw during my visit	N/A	N/A		Instructions during my visit were easy to understand	N/A	N/A	
	I felt cared for during my visit	N/A	N/A		Staff made me feel respected	N/A	N/A	
	My questions were answered during my visit	N/A	N/A		Were you given information about why you needed certain tests in a way that you could easily understand?	N/A	N/A	
	What is most important to you when you choose a location to receive testing? [*Cost, wait time, being treated with respect, confidentiality, convenient hours, high quality care, location of clinic, fast turnaround of results, safety, other*]	N/A	N/A		Did you have enough say about the services you received today?	N/A	N/A	
	On a scale from 0 to 10, how likely are you to recommend testing at this clinic to someone you know	N/A	N/A		What additional services do you wish you had received?	N/A	N/A	
	What can we do to improve our services?	N/A	N/A		How did you find out about this site/why did you come to this site to receive testing?	N/A	N/A	
	Please share any additional comments	N/A	N/A		Have you received testing at this clinic before? [If Yes] why do you choose to receive testing at this clinic?	N/A	N/A	
	Demographic Variables- age, race/ethnicity, gender identity, zip code	N/A	N/A		How do you prefer to receive testing results? Electronically in a patient portal; phone call; text message; other	N/A	N/A	

Appendix E. Data Dictionary

Variable Name	Variable Description	Variable Type	Variable Coding
Patient characteristics			
patient_id	Unique patient identifier	integer	integer
participating_site	Site or clinic identifier	integer	1 = Site 1 name 2 = Site 2 name 3 = Site 3 name 4 = Site 4 name 5 = Site 5 name 6 = Site 6 name 7 = Site 7 name
express	Whether visit was express or not	integer	1 = Express 0 = Clinician 3 = Other 2 = Pre-express (clinician)
express_other	Defining other visit type, if applicable	string	string
new_patient	Whether this is a new patient (first visit) or not	integer	1 = Yes 0 = No
age	Age of patient (years)	integer	integer
zip_code	Patient zip code	string	string
race	Patient race	integer	1 = African American/Black 2 = White 3 = Asian 4 = American Indian/Alaska Native 5 = Native Hawaiian/Other Pacific Islander 6 = Multiracial 77 = Other . = Missing
ethnicity	Patient ethnicity	integer	1 = Hispanic/Latino/a/x, or Spanish origin 2 = Not of Hispanic/Latino/a/x, or Spanish origin . = Missing

Variable Name	Variable Description	Variable Type	Variable Coding
language	Patient preferred language	integer	1 = English 2 = Spanish 3 = French 4 = Creole 5 = Russian 6 = Chinese 7 = Arabic 8 = Korean 9 = Portuguese 10 = Vietnamese 11 = Mandarin 12 = Cantonese 13 = American Sign Language 14 = Amharic 15 = Burmese 16 = Hindi 17 = Japanese 18 = Nepali 19 = Oromo 20 = Samoan 21 = Somali 22 = Thai 23 = Welsh 24 = Norwegian 77 = Other . = Missing
health_insurance	Patient has health insurance	integer	1 = Yes 0 = No 77 = Unknown . = Missing
housing	Patient housing status	integer	1 = Stably housed 2 = At risk of losing housing 3 = Imminently losing housing 4 = Homeless . = Missing
refugee	Whether patient self-reported as refugee	integer	1 = Yes 0 = No . = Missing
income	Patient income (annual or monthly, depending on what clinic collects)	integer	numeric
veteran	Whether patient self-reported as veteran	integer	1 = Yes 0 = No . = Missing

Variable Name	Variable Description	Variable Type	Variable Coding
incarceration	Patient history of incarceration (ever experienced)	integer	1 = Yes 0 = No . = Missing
gender_identity	Self-reported gender identity	integer	1 = Male 2 = Female 3 = Transgender persons 4 = Non-binary/Genderqueer/Gender Non-conforming 77 = Other . = Missing
sex_assigned	Sex assigned at birth	integer	1 = Male 2 = Female 3 = Intersex . = Missing
sexual_orientation	Patient sexual orientation or identity	integer	1 = Straight/Heterosexual 2 = Bisexual 3 = Queer 4 = Lesbian 5 = Gay 6 = Pansexual 7 = Homosexual/Same gender loving 77 = Other . = Missing
sexpart_current	Number of current sex partners reported	integer	integer
sexpart_2mos	Number of sexual partners last 2 months	Integer	integer
sexpart_12mos	Number of total sex partners in last 12 months	integer	integer
sexpart_ever	Total number of sex partners reported (lifetime)	integer	integer
sexpart_current_type	Type of current sex partners reported	integer	1 = Males 2 = Females 3 = Males and females 4 = Transgender persons 5 = non-binary/genderqueer 6 = More than one listed category

Variable Name	Variable Description	Variable Type	Variable Coding
sexpart_12mos_type	Type of sex partners reported in past 12 months	integer	1 = Males 2 = Females 3 = Males and females 4 = Transgender persons 5 = non-binary/genderqueer 6 = More than one listed category
sexpart_preference	Reported sex partner preferences	integer	1 = Males 2 = Females 3 = Males and females 4 = Transgender persons 5 = non-binary/gender queer 6 = More than one listed category
exgen_30days	Extragenital exposure reported last 30 days	integer	1 = Yes 0 = No . = Missing
exgen_unspecified	Extragential exposure reported, time period not specified	integer	1 = Yes 0 = No . Missing
exgen_oral_give	Reported giving oral sex	integer	1 = Yes 0 = No . Missing
exgen_oral_receive	Reported receiving oral sex	integer	1 = Yes 0 = No . Missing
exgen_rectal_give	Reported giving anal sex (insertive)	integer	1 = Yes 0 = No . Missing
exgen_rectal_receive	Reported receiving anal sex	integer	1 = Yes 0 = No . Missing
exgen_rectal_receive_or_oral_give	Reported either receiving anal sex or performing oral sex, time period not specified	integer	1 = Yes 0 = No 77 = Unknown . Missing
substance_use_any	Reported any substance use, time period not specified	integer	1 = Yes 0 = No . Missing
substance_use_heroin	Reported heroin use	integer	1 = Yes 0 = No . Missing

Variable Name	Variable Description	Variable Type	Variable Coding
substance_use_cocaine	Reported cocaine use	integer	1 = Yes 0 = No . Missing
substance_use_meth	Reported methamphet-amine use	integer	1 = Yes 0 = No . Missing
substance_use_marijuana	Reported Marijuana use	integer	1 = Yes 0 = No . Missing
substance_use_alcohol	Reported alcohol use/abuse	integer	1 = Yes 2 = No . Missing
substance_use_other	Reported other substance use	string	string
idu_ever	Reported injecting drugs, ever	integer	1 = Yes 0 = No . Missing
idu_6_months	Reported injecting drugs in the last six months	integer	1 = Yes 0 = No . Missing
transactional_sex	Reported transacting sex for money, ever	integer	1 = Yes 0 = No . Missing
transaction_sex_drugs	Reported transacting sex for drugs, ever	integer	1 = Yes 0 = No . Missing
sex_while_high	Reported having sex while high, ever	integer	1 = Yes 0 = No . Missing
Capacity and Appointment Time			
visit_date	Date of visit	date	MM/DD/YYYY
arrival_time	Time of arrival/check-in	time	hh:mm AM/PM
phlebotomy_time	Time patient receives phlebotomy (not available for most sites)	time	hh:mm AM/PM
consultation_time	Time patient consultation occurs	time	hh:mm AM/PM
leave_time	Time patient checks-out or leaves clinic	time	hh:mm AM/PM

Variable Name	Variable Description	Variable Type	Variable Coding
eligible_express	Whether patient was eligible for an express visit, based on site specific criteria	integer	1 = Yes 0 = No 77 = Unknown . Missing
visit_time	Time between patient arrival and departure	calculation (leave_time - arrival_time)	hh:mm
express_visit_num	number of express visits per patient	calculation (add total express visits per patient)	integer (0, 1, 2, ... XX)
time_between_visit	number of days between visits, for those with more than one visit (most recent two visits)	calculation (subtract days between two most recent visit dates, unless most recent visit is follow-up appointment)	integer (0, 1, 2, ... XX)
Testing, Treatment & PrEP			
result_ct	Result of chlamydia test	integer	1 = positive 0 = negative 3 = inconclusive 77 = unknown . = missing
result_gc	Result of gonorrhea test	integer	1 = positive 0 = negative 3 = inconclusive 77 = unknown . = missing
result_syph	Result of syphilis test	integer	1 = positive 0 = negative 3 = inconclusive 77 = unknown . = missing
result_hiv	Result of HIV test	integer	1 = positive 0 = negative 3 = inconclusive 77 = unknown . = missing
result_date_ct	Date result was posted from lab - chlamydia	date	MM/DD/YYYY
result_date_gc	Date result was posted from lab - gonorrhea	date	MM/DD/YYYY

Variable Name	Variable Description	Variable Type	Variable Coding
result_date_syph	Date result was posted from lab - syphilis	date	MM/DD/YYYY
result_date_hiv	Date result was posted from lab - HIV	date	MM/DD/YYYY
result_notification_date_ct	Date patient was notified of chlamydia result	date	MM/DD/YYYY
result_notification_date_gc	Date patient was notified of gonorrhea result	date	MM/DD/YYYY
result_notification_date_syh	Date patient was notified of syphilis result	date	MM/DD/YYYY
result_notification_date_hiv	Date patient was notified of HIV result	date	MM/DD/YYYY
contact_attempt	Number of times patient was contacted to provide results	integer	number (0 through XX)
followup_recommended	Whether a follow-up appointment was recommended	integer	1 = Yes 0 = No . Missing
followup_scheduled	Whether a follow-up appt was scheduled	integer	1 = Yes 0 = No . Missing
followup_occurred	Whether a follow-up appt occurred or **patient returned for treatment**	integer	1 = Yes 0 = No . Missing
followup_date	What the date was of the follow-up appt, if it occurred, or when it was scheduled to occur	date	MM/DD/YYYY If patient did not return = 01/01/2000
tested_ct	Whether a test was ordered/the patient was tested for chlamydia	integer	1 = Yes 0 = No . Missing
tested_gc	Whether a test was ordered/the patient was tested for gonorrhea	integer	1 = Yes 0 = No . Missing
tested_syph	Whether a test was ordered/the patient was tested for syphilis	integer	1 = Yes 0 = No . Missing
tested_hiv	Whether a test was ordered/the patient was tested for syphilis	integer	1 = Yes 0 = No . Missing
treatment_prescribed_ct	Whether treatment was prescribed for chlamydia	integer	1 = Yes 0 = No . Missing

Variable Name	Variable Description	Variable Type	Variable Coding
treatment_prescribed_gc	Whether treatment was prescribed for gonorrhea	integer	1 = Yes 0 = No . Missing
treatment_prescribed_syph	Whether treatment was prescribed for syphilis	integer	1 = Yes 0 = No . Missing
treatment_prescribed_hiv	Whether treatment was prescribed for HIV	integer	1 = Yes 0 = No . Missing
treatment_date_ct	Date treatment was prescribed - chlamydia	date	MM/DD/YYYY
treatment_date_gc	Date treatment was prescribed - gonorrhea	date	MM/DD/YYYY
treatment_date_syph	Date treatment was prescribed - syphilis	date	MM/DD/YYYY
treatment_date_hiv	Date treatment was prescribed - HIV	date	MM/DD/YYYY
treatment_complete_ct	Whether treatment was completed - chlamydia	integer	1 = Yes 0 = No . Missing
treatment_complete_gc	Whether treatment was completed - gonorrhea	integer	1 = Yes 0 = No . Missing
treatment_complete_syph	Whether treatment was completed - syphilis	integer	1 = Yes 0 = No . Missing
treatment_complete_hiv	Whether treatment was completed - HIV	integer	1 = Yes 0 = No . Missing
ept_offered	Whether EPT was offered	integer	1 = Yes 0 = No . Missing
ept_prescription	Whether EPT was prescribed	integer	1 = Yes 0 = No . Missing
ept_provided	Whether EPT was provided during follow-up	integer	1 = Yes 0 = No . Missing
ept_provided_num	Number of EPT prescriptions provided	integer	integer
prep_curr	Whether patient is currently on PrEP	integer	1 = Yes 0 = No . Missing

Variable Name	Variable Description	Variable Type	Variable Coding
prep_counseling	Whether patient was provided PrEP counseling	integer	1 = Yes 0 = No . Missing
prep_interest	Whether patient is interested in PrEP initiation or discussion	integer	1 = Yes 0 = No . Missing
prep_followup	Whether a PrEP counseling appt was scheduled	integer	1 = Yes 0 = No . Missing
prep_initiated	Whether patient was initiated on PrEP at appt	integer	1 = Yes 0 = No . Missing
result_time_ct	Days between patient visit and result posted from lab - chlamydia	Calculation (result_date_ct - visit_date)	integer (0, 1, 2, ... XX)
result_time_gc	Days between patient visit and result posted from lab - gonorrhea	Calculation (result_date_gc - visit_date)	integer (0, 1, 2, ... XX)
result_time_syph	Days between patient visit and result posted from lab - syphilis	Calculation (result_date_syph - visit_date)	integer (0, 1, 2, ... XX)
result_time_HIV	Days between patient visit and result posted from lab - HIV	Calculation (result_date_hiv - visit_date)	integer (0, 1, 2, ... XX)
notification_time_ct	Days between results posted from lab and notification to patients - chlamydia	Calculation (result_notification_date - result_date_ct)	integer (0, 1, 2, ... XX)
notification_time_gc	Days between results posted from lab and notification to patients - gonorrhea	Calculation (result_notification_date -result_date_gc)	integer (0, 1, 2, ... XX)
notification_time_syph	Days between results posted from lab and notification to patients - syphilis	Calculation (result_notification_date - result_date_syph)	integer (0, 1, 2, ... XX)
notification_time_hiv	Days between results posted from lab and notification to patients - hiv	Calculation (result_notification_date - result_date_hiv)	integer (0, 1, 2, ... XX)
treatment_time_ct	Days between patient visit and treatment prescription date - chlamydia	Calculation (treatment_date_ct - visit_date)	integer (0, 1, 2, ... XX)

Variable Name	Variable Description	Variable Type	Variable Coding
treatment_time_gc	Days between patient visit and treatment prescription date - gonorrhea	Calculation (treatment_date_gc - visit_date)	integer (0, 1, 2, ... XX)
treatment_time_syph	Days between patient visit and treatment prescription date - syphilis	Calculation (treatment_date_syph - visit_date)	integer (0, 1, 2, ... XX)
treatment_time_hiv	Days between patient visit and treatment prescription date - HIV	Calculation (treatment_date_hiv - visit_date)	integer (0, 1, 2, ... XX)

Appendix F. Satisfaction Survey

Tell us about your visit today

We want to hear about your experience at the clinic today. Your feedback will help us learn what we are doing well and what we can do to improve your experience. This survey is part of an initiative, led by the National Association of County and City Health Officials (NACCHO) and funded by the Centers for Disease Control and Prevention (CDC), to learn about sexually transmitted infection (STI) services across the country.

Your responses are anonymous and will only be seen by members of the evaluation team; the staff you saw today will only see summary information from everyone who responds to this survey. If you have any questions or concerns, you may contact Samantha Ritter at sritter@naccho.org.

Please check the box that best represents your experience today.

	Strongly agree	Somewhat agree	Somewhat disagree	Strongly disagree	No opinion/NA
1. The clinic hours are convenient for my schedule.	☐	☐	☐	☐	☐
2. The length of time I waited was ok.	☐	☐	☐	☐	☐
3. The amount of time I spent with staff during my visit felt right.	☐	☐	☐	☐	☐
4. The services I received addressed my needs.	☐	☐	☐	☐	☐
5. I have confidence in the staff I met.	☐	☐	☐	☐	☐
6. I felt respected during my time at the clinic.	☐	☐	☐	☐	☐
7. Overall, I am satisfied with my visit.	☐	☐	☐	☐	☐

8. What is most important to you when you choose a location to receive testing? **(Select one)**
- ☐ Cost
- ☐ Wait time
- ☐ Being treated with respect
- ☐ Confidentiality
- ☐ Convenient hours
- ☐ High quality care
- ☐ Location of clinic
- ☐ Fast turnaround of results
- ☐ Safety
- ☐ Cleanliness
- ☐ Other: _____

9. On a scale from 1 to 10, how likely are you to recommend testing at this clinic to someone you know?

Extremely unlikely   **Extremely likely**

☐   ☐   ☐   ☐   ☐   ☐   ☐   ☐   ☐   ☐
1   2   3   4   5   6   7   8   9   10

10. What can we do to improve our services?
_____

11. Please share any additional comments.
_____

Tell us about yourself

12. What is your age? _____

13. How would you describe yourself? (Check all that apply)
☐ American Indian or Alaska Native
☐ Asian
☐ Black or African American
☐ Native Hawaiian or Pacific Islander
☐ White or Caucasian
☐ Prefer not to say
☐ Not listed: _____

14. How would you describe yourself?
☐ Hispanic/Latinx, Latino/a/x, or Spanish origin
☐ Not of Hispanic/Latinx, Latino/a/x, or Spanish origin

15. How would you describe yourself?
☐ Female
☐ Male
☐ Non-binary
☐ Transgender persons
☐ Prefer not to say
☐ Not listed: _____

16. What sex is listed on your birth certificate?
☐ Female
☐ Male
☐ Prefer not to say

17. What is your zip code? _____

Thank you for taking this survey!

Optional questions to add

	Strongly agree	Somewhat agree	Somewhat disagree	Strongly disagree	No opinion/NA
The clinic is in a convenient location.	☐	☐	☐	☐	☐
The clinic setting makes me feel comfortable	☐	☐	☐	☐	☐
The check-in kiosk was easy to use.	☐	☐	☐	☐	☐
The intake process was clear.	☐	☐	☐	☐	☐
The staff treated me with respect.	☐	☐	☐	☐	☐
I felt comfortable self-collecting samples.	☐	☐	☐	☐	☐
The instructions I was given to self-collect samples were easy to understand.	☐	☐	☐	☐	☐
I was provided with information about why I needed certain tests in a way that was easy to understand.	☐	☐	☐	☐	☐
I felt in control over the services I received today.	☐	☐	☐	☐	☐

Why did you come to this site today?
☐ Cost
☐ Wait time
☐ Being treated with respect
☐ Confidentiality
☐ Convenient hours
☐ High quality care
☐ Convenient location
☐ Fast turnaround of results
☐ Safety
☐ Cleanliness
☐ Other: _____

What other services would you like to see offered at this clinic?

_____

Have you received testing at this clinic before?

☐ Yes

☐ No

☐ Not sure

If yes, why did you come back to this clinic? _____

How do you prefer to receive test results?

☐ Electronically through a patient portal

☐ Phone call

☐ Text message

☐ In person

☐ Other: _____

How do you describe your sexual orientation?

☐ Bisexual

☐ Gay/Lesbian/Same-gender loving

☐ Straight/Heterosexual

☐ Questioning/unsure

☐ Not listed: _____

☐ Prefer not to say

Appendix G. Interpreting statistical tests

In all of our tests and tables in Appendix H, we assessed how the independent variables (express or non-express; new patient or existing patient) related to the dependent/outcome variables of interest (patient characteristics, clinic capacity, STI testing and treatment, and patient satisfaction). Most of the outcome variables in this evaluation were categorical (i.e., race, received treatment yes/no), but some outcomes were continuous (i.e., mean number of sexual partners, time of appointment). Below is a brief overview of the statistical tests used, what they mean, and how to interpret the results, which can be referenced, as needed.

For this evaluation, we used the alpha level of 0.05 to assess statistically significant differences between groups for all analyses performed. In this way, if we obtained a p-value <0.05 for any of the analyses, we rejected the null hypothesis that the groups were the same. However, this means that there is a 5% chance that we concluded there is a difference between groups, when there was no actual difference.

Categorical Outcomes

Chi-Square — A chi-square test for independence uses a contingency table to assess whether observed differences in distribution of categorical variables are or are not due to chance. A small test statistic means that the observed data fits the expected data and there is a likely relationship; a large test statistic means that the observed data does not fit the expected data and there likely is not a relationship. The degrees of freedom (DF) is the number of categories in the categorical outcome minus one. Chi-squared tests are run first to determine if there is an apparent difference between variables. If the chi-square result is insignificant, we can assume that any other statistical test run on the relationship between variables will also be insignificant.

Binomial Logistic Regression — A binomial logistic regression predicts the probability that an observation falls into one of two categories of a dichotomous dependent variable, based on an independent variable (express or non-express; new patient or existing patient). Logistic regressions provide an odds ratio, a statistic that quantifies the strength of the association between the dependent and independent variables. If the odds ratio is greater than 1, we can interpret

it as demonstrating that the variables are positively associated; the presence of the independent variable increases the odds of the outcome). If the odds ratio is less than 1, the variables are negatively associated; the presence of the independent variable decreases the odds of the outcome).

Crude odds ratios consider the outcomes of two variables, one outcome and one dependent variable. Adjusted odds ratios include one or more additional dependent variables. In this evaluation, we adjusted for the location of the participating STI site to assess how the odds of an outcome changed, when site location was held constant.

Multinomial Logistic Regression — Multinomial logistic regressions are run when there are more than two categories of the dependent variable (e.g., six outcome categories for race). When there are more than two categories, one category is defined as a reference group in which all other categories are compared. In this evaluation, we set the category with the highest proportion in the array of categories as the reference category.

Similar to binomial regressions, multinomial regressions can have crude and adjusted odds ratios and p-values. We assessed both in the tables below.

Continuous Outcomes

T-test — A t-test is used to determine if there is a significant difference between the means of two groups. The test statistic is the ratio between the difference between the two groups and within the groups. The larger the t score, the more difference between groups. The degrees of freedom is the sample size minus one. T-tests are run first to determine if there are apparent differences between variables. If the t-test result is insignificant, we can assume that any other statistical test run on the relationship between variables will also be insignificant.

Simple Linear Regression — Linear regressions are used when the outcome variable is continuous. Simple linear regressions are used with one dependent variable (express or non-express; new or existing patient). Beta is the amount of change in the outcomes that accompanies a unit change in the dependent variable. R-squared is the proportion of the variable that is explained by the model, for example, an R-squared value of 0.027 means that 2.7% of variation in the outcome is explained by the dependent variable.

Multiple Linear Regression — Multiple linear regressions are used when there is more than one dependent variable. For these analyses, we added the location of the participating STI site to see how the associations changed when site location was held constant. The beta value is again reported, as well as the 95% confidence interval. The 95% confidence interval includes 0 when there is no relation between the variables. If the confidence interval does not include 0, this suggests a statistically significant difference in the outcomes of interest.

Appendix H. Tables

Patient Characteristics

What are the characteristics of patients receiving express services?

Table 1: Characteristics of unique patients receiving express and non-express services across 12 sites in six U.S. cities, during a six-month period from 2018–2019[1]

	Express (n=13,071)		Non-express (n=23,665)		Total (N=36,736)	
	n	%	n	%	n	%
Clinic location	**13,071**		**23,665**		**36,736**	
1 — Howard Brown	425	3.3	1,517	6.4	1,942	5.3
2 — Nashville	379	2.9	2,548	10.8	2,927	8.0
3 — NYC 1	1,034	7.9	1,918	8.2	2,952	8.0
4 — NYC 2	827	6.3	1,254	5.3	2,081	5.7
5 — NYC 3	2,317	17.7	3,206	13.6	5,523	15.0
6 — NYC 4	1,931	14.8	2,112	8.9	4,043	11.0
7 — NYC 5	1,573	12.0	1,984	8.4	3,557	9.7
8 — NYC 6	1,942	14.9	2,196	9.3	4,138	11.3
9 — NYC 7	1,090	8.3	2,128	9.0	3,218	8.8
10 — Orange County	188	1.4	2,111	8.9	2,299	6.3
11 — Monroe County	743	5.7	85	0.4	828	2.3
12 — Seattle & King County	622	4.8	2,606	11.0	3,228	8.8
Age[2]	**13,071**		**23,665**		**36,736**	
10–14	6	0.0	15	0.1	21	0.1
15–19	784	6.0	1,426	6.0	2,210	6.0
20–24	2,791	21.4	4,501	19.0	7,292	19.9
25–29	3,548	27.1	6,071	25.7	9,619	26.2
30–34	4,208	17.1	2,230	17.1	6,448	17.6
35–39	1,313	10.1	2,434	10.3	3,747	10.2
40–44	785	6.0	1,510	6.4	2,296	6.3
45–54	912	7.0	2,135	9.0	3,047	8.3
55–64	461	3.5	1,014	4.3	1,475	4.0
65+	231	1.8	351	1.5	582	1.6
Race[2]	**12,840**		**23,131**		**35,971**	
African American/Black	6,611	51.5	11,389	49.2	18,000	50.0
White	3,018	23.5	6,369	27.5	9,387	26.1
Asian/Native Hawaiian or Other Pacific Islander	833	6.5	1,422	6.2	2,255	6.3
American Indian/Alaska Native	101	0.8	218	0.9	319	0.9
Multiracial	48	0.4	132	0.6	180	0.5
Other	2,229	17.4	3,601	15.6	5,830	16.2
Ethnicity[2]	**11,067**		**18,896**		**29,963**	
Hispanic/Latinx	2,800	25.3	5,731	30.3	8,531	28.5

[1] Percentages may not add up to 100, due to rounding

[2] Includes results from six sites that provided information on age, race, and ethnicity at the patient level — Howard Brown, Nashville, New York City, Orange County, Monroe County, and Seattle & King County

Table 2: Primary language spoken among unique patients receiving express and non-express services across 12 sites in six U.S. cities, during a six-month period from 2018–2019[1,2]

	Express (n=12,548)		Non-express (n=23,080)		Total (N=35,628)	
	n	%	n	%	n	%
English	11,235	89.5	20,396	88.4	31,631	88.8
Spanish	880	7.0	2,056	8.9	2,936	8.2
Other	433	3.5	628	2.7	1,061	3.0

[1] Percentages may not add up to 100, due to rounding

[2] Includes results from six sites that provided information on primary language spoken at the patient level — Howard Brown, Nashville, New York City, Orange County, Monroe County, and Seattle & King County

Table 3: Other characteristics of unique patients receiving express and non-express services across 12 sites in five U.S. cities, during a six-month period from 2018–2019

	Express (n=13,071)		Non-express (n=23,665)		Total (N=36,736)	
	n	%	n	%	n	%
Health insurance[1]	**11,146**		**19,481**		**30,627**	
Insured	3,189	28.6	6,516	33.4	9,705	31.7
Housing[2]	**11,555**		**19,454**		**31,009**	
Experiencing homelessness	477	4.1	1,246	6.4	1,723	5.6

[1] Includes results from five sites that provided information on health insurance at the patient level — Howard Brown, Nashville, New York City, Monroe County, and Seattle & King County

[2] Includes results from four sites that provided information on housing status at the patient level — Howard Brown, Nashville, New York City, and Seattle & King County

Table 4: Gender identity, sex assigned at birth, and sexual orientation of unique patients receiving express and non-express services across 12 sites in six U.S. cities, during a six-month period from 2018–2019[1]

	Express (n=13,071)		Non-express (n=23,665)		Total (N=36,736)	
	n	%	n	%	n	%
Gender identity[2]	**12,627**		**23,377**		**36,004**	
Male	8,492	67.3	15,117	64.7	23,609	65.6
Female	4,055	32.1	7,740	33.1	11,795	32.8
Transgender persons	34	0.3	410	1.8	444	1.2
Non-binary/Genderqueer/ Gender Non-conforming	46	0.4	104	0.4	150	0.4
Other	0	0.0	6	<0.1	6	<0.1
Sex assigned at birth[3]	**12,238**		**18,874**		**31,112**	
Male	8,319	68.0	12,348	65.4	20,667	66.4
Female	3,912	32.0	6,517	34.5	10,429	33.5
Intersex	7	0.1	9	0.1	16	0.1
Sexual orientation[4]	**840**		**3,726**		**4,566**	
Straight/Heterosexual	481	57.3	1,401	37.6	1,882	41.2
Bisexual	92	11.0	416	11.2	508	11.1
Queer	27	3.2	225	6.0	252	5.5
Lesbian	5	0.6	47	1.3	52	1.1
Gay	217	25.8	1,543	41.4	1,760	38.6
Pansexual	17	2.0	55	1.5	72	1.6
Other	840	0.1	39	0.1	40	0.9

[1] Percentages may not add up to 100, due to rounding
[2] Includes results from six sites that provided information on gender identity at the patient level — Howard Brown, Nashville, New York City, Orange County, Monroe County, and Seattle & King County
[3] Includes results from four sites that provided information on sex assigned at birth at the patient level — Howard Brown, New York City, Monroe County, and Seattle & King County
[4] Includes results from two sites that provided information on sexual orientation at the patient level — Howard Brown and Seattle & King County

Table 5: Characteristics of sexual partners of unique patients receiving express and non-express services across 11 sites in five U.S. cities, during a six-month period from 2018–2019[1]

	Express (n=13,071)		Non-express (n=23,665)		Total (N=36,736)	
	n or mean	% or SD	n or mean	% or SD	n or mean	% or SD
Number of sex partners reported in last two months[2]	**554**		**2,323**		**5,294**	
Mean number of sex partners reported in last two months	2.0	2.0	2.5	2.4	2.3	2.2
Number of sex partners reported in last 12 months[3]	**1,454**		**2,657**		**6,392**	
Mean number of sex partners reported in last 12 months	4.1	17.9	17.9	275.0	11.8	178.1
Gender identity of current sex partner(s)[4]	**15,479**		**1,489**		**16,968**	
Male	869	58.4	9,140	59.1	10,009	59.0
Female	519	34.9	5,747	37.1	6,266	36.9
Male and female	76	5.1	455	2.9	531	3.1
Transgender persons	12	0.8	36	0.2	48	0.3
Non-binary/gender queer	0	0.0	1	0.0	1	0.0
More than one gender identity selected	13	0.9	100	0.7	113	0.7
Gender identity of sex partner(s) in past 12 months[2]	**810**		**2,670**		**3,480**	
Male	365	45.1	1,635	61.2	2,000	57.5
Female	344	42.5	700	26.2	1,044	30.0
Male and female	36	4.4	55	2.1	91	2.6
Transgender persons	12	1.5	11	0.4	23	0.7
Non-binary/gender queer	0	0.0	2	0.1	2	0.1
More than one gender identity selected	53	6.5	267	10.0	320	9.2

[1] Percentages may not add up to 100, due to rounding
[2] Includes results from two sites that provided information on sex partners at the patient level — Howard Brown and Seattle & King County
[3] Includes results from two sites that provided information on sex partners at the patient level — Monroe County and Seattle & King County
[4] Includes results from three sites that provided information on sex partners at the patient level — Howard Brown, New York City, and Orange County

Table 6: Sexual history/activity of unique patients receiving express and non-express services across 11 sites in five U.S. cities, during a six-month period from 2018–2019

	Express (n=1,155)		Non-express (n=14,675)		Total (N=15,830)	
	n	%	n	%	n	%
Extragenital exposure reported at most recent visit[1]	1,155		14,675		15,830	
Reported extragenital exposure reported at most recent visit	799	69.2	9,856	67.2	10,655	67.3
Received or gave oral (pharyngeal) sex[2]	463		1,975		2,438	
Reported that they received or gave oral (pharyngeal) sex	440	95.0	730	37.0	1,170	48.0
Received or gave anal (rectal) sex[2]	234		1,705		1,939	
Reported that they received or gave anal (rectal) sex	211	90.2	460	27.0	671	34.6

[1] Includes results from five sites that provided information on extragenital exposure at the patient level — Howard Brown, New York City, Orange City, Monroe County, and Seattle & King County

[2] Includes results from three sites that provided information on oral (pharyngeal) at the patient level — Howard Brown, Orange County, and Monroe County

Table 7: Substance use among unique patients receiving express and non-express services across 10 sites in four U.S. cities, during a six-month period from 2018–2019

	Express (n=1,066)		Non-express (n=4,494)		Total (N=5,560)	
	n	%	n	%	n	%
Alcohol[1]	112		1,452		1,564	
Reported alcohol use/abuse	84	75.0	1,076	74.1	1,160	74.2
Any substance use[2]	1,066		4,494		5,560	
Reported any substance use	396	37.2	1,679	37.4	2,075	37.3
Marijuana1	429		1,643		2,072	
Reported marijuana use	229	53.4	229	13.9	458	22.1
High-risk substance use[2]	1,006		3,988		4,994	
Reported high-risk substance use	143	1.1	489	2.1	632	1.7
Cocaine[2]	1,008		3,976		4,984	
Reported cocaine use	98	9.7	315	7.9	413	8.3
Methamphetamine[2]	1,008		4,000		5,008	
Reported methamphetamine use	72	7.1	247	6.2	319	6.4
Heroin[2]	1,005		3,950		4,955	
Reported heroin use	49	4.9	65	1.7	114	2.3
Injection drug use[3]	810		4,205		5,015	
Reported injection drug use	6	0.7	35	0.8	41	0.8

[1] Includes results from two sites that provided information on alcohol and marijuana at the patient level — Howard Brown and Orange County

[2] Includes results from three sites that provided information on high-risk substance use including cocaine, methamphetamine, and heroin at the patient level — Howard Brown, Orange County, and Seattle & King County

[3] Includes results from three sites that provided information on reported injection drug use at the patient level — Howard Brown, Nashville, and Orange County

Table 8: Reported ever transacting sex for money or drugs among unique patients receiving express and non-express services across three sites in three U.S. cities, during a six-month period from 2018–2019

	Express (n=1,074)		Non-express (n=4,600)		Total (N=5,674)	
	n	%	n	%	n	%
Reported transacting sex for money or drugs, ever[1]	18	1.7	143	3.1	161	2.8

[1] Includes results from three sites that provided information on transactional sex at the patient level — Howard Brown, Orange County, and Seattle & King County

Table 9: Age of unique patients receiving express and non-express services across 12 sites in six U.S. cities, during a six-month period from 2018–2019[1]

	Howard Brown (N=1,942)	Nashville (N=2,927)	New York City (N=25,512)	Orange County (N=2,299)	Monroe County (N=828)	Seattle & King County (N=3,228)
	%	%	%	%	%	%
10–14	0.0	0.0	0.1	0.1	0.1	0.0
15–19	2.4	9.0	6.6	3.4	8.0	1.9
20–24	20.5	25.9	20.4	15.7	19.7	12.3
25–29	28.3	23.8	27.2	22.3	19.8	23.4
30–34	19.3	14.6	17.7	16.7	13.9	19.9
35–39	10.1	7.6	10.1	10.6	8.0	13.6
40–44	4.8	6.0	5.8	9.1	6.3	8.6
45–54	8.8	7.2	7.4	13.7	6.5	12.2
55–64	4.6	3.3	3.6	6.0	4.5	6.0
65+	1.2	2.7	1.0	2.3	13.3	2.0

[1] Percentages may not add up to 100, due to rounding

Table 10: Race and ethnicity of unique patients receiving express and non-express services across 12 sites in six U.S. cities, during a six-month period from 2018–2019[1]

	Howard Brown (N=1,942)	Nashville (N=2,927)	New York City (N=25,512)	Orange County (N=2,299)	Monroe County (N=828)	Seattle & King County (N=3,228)
	%	%	%	%	%	%
Race	**1,113**	**2,832**	**25,512**	**2,295**	**726**	**2,907**
African American/Black	65.5	59.9	55.4	4.5	58.8	18.3
White	23.0	35.1	17.0	69.5	26.4	64.7
Asian/Native Hawaiian or Other Pacific Islander	2.8	0.7	5.8	14.5	2.8	12.2
American Indian/Alaska Native	0.3	0.1	1.0	1.0	0.0	1.6
Multiracial	1.6	0.0	0.1	0.0	3.3	3.2
Other	6.8	4.2	20.7	10.5	8.7	0.0
Ethnicity	**1,681**	**13**	**22,173**	**2,261**	**726**	**3,109**
Hispanic/Latinx	13.5	7.7	28.9	61.3	13.1	13.5

[1] Percentages may not add up to 100, due to rounding

Table 11: Gender identity and sexual orientation of unique patients receiving express and non-express services across 12 sites in six U.S. cities, during a six-month period from 2018–2019[1]

	Howard Brown (N=1,942)	Nashville (N=2,927)	New York City (N=25,512)	Orange County (N=2,299)	Monroe County (N=828)	Seattle & King County (N=3,228)
	%	%	%	%	%	%
Gender identity	**1,920**	**2,835**	**22,512**	**2,292**	**411**	**3,034**
Male	57.9	59.0	63.8	79.5	68.4	80.6
Female	23.9	41.0	35.6	19.5	31.3	16.7
Transgender persons	16.7	0.0	0.3	0.9	0.2	0.8
Non-binary/Genderqueer/ Gender Non-conforming	1.6	0.0	0.3	0.0	0.0	1.8
Other	0.0	0.0	0.0	0.1	0.0	0.1
Sexual orientation	**1,535**				**75**	**2,956**
Straight/Heterosexual	34.5	–	–	–	–	43.3
Bisexual	14.5	–	–	–	–	9.5
Queer	9.2	–	–	–	–	3.8
Lesbian	2.8	–	–	–	–	0.3
Gay	37.5	–	–	–	–	40.1
Pansexual	0.0	–	–	–	–	2.4
Other	1.4	–	–	–	–	0.6

[1] Percentages may not add up to 100, due to rounding

Table 12: Characteristics of unique patients receiving express and non-express services across 12 sites in six U.S. cities, during a six-month period from 2018–2019

	Howard Brown (N=1,942)	Nashville (N=2,927)	New York City (N=25,512)	Orange County (N=2,299)	Monroe County (N=828)	Seattle & King County (N=3,228)
	%	%	%	%	%	%
Language	**2,183**	**2,421**	**25,369**	**2,294**	**726**	**3,222**
Language other than English	1.6	4.3	12.6	24.2	6.3	2.4
Health insurance	**2,548**	**9,343**	**21,929**		**730**	**6,082**
Uninsured	36.8	88.4	71.3	–	81.2	39.1
Housing	**1,491**	**907**	**25,383**			**3,228**
Persons experiencing homelessness	21	2.4	4.5	–	–	7.8
Substance use	**1,318**			**390**		**3,228**
Reported any substance use	67.9	–	–	53.3	–	–
Reported high-risk substance use	1.8	–	–	1.3	–	17.0
Injection drug use	**2,548**	**9,671**		**163**		
Reported injection drug use	1.0	0.2	–	7.4	–	–

How are patients receiving express services the same or different from those receiving non-express services?

Table 13: Differences in characteristics between patients receiving express services, compared with those receiving non-express services, across 12 sites in six U.S. cities, during a six-month period from 2018–2019[1]

	Logistic Regressions				Chi-Square Test		
	Crude OR (95% CI)	P-value	Adjusted OR[2] (95% CI)	Adjusted P-value	Chi-square	DF	P-value
10–14	0.68 (0.27–1.77)	0.433	0.51 (0.19–1.38)	0.185	93.82	9	<0.001*
15–19	0.94 (0.85–1.04)	0.215	0.86 (0.78–0.96)	0.004*			
20–24	1.06 (0.99–1.13)	0.065	1.07 (0.99–1.14)	0.581			
25–29	Reference group						
30–34	0.91 (0.85–0.97)	0.005*	0.92 (0.86–0.99)	0.020*			
35–39	0.92 (0.85–0.99)	0.047*	0.95 (0.88–1.03)	0.232			
40–44	0.89 (0.81–0.98)	0.016*	0.96 (0.87–1.06)	0.409			
45–54	0.73 (0.67–0.80)	<0.001*	0.81 (0.74–0.89)	<0.001*			
55–64	0.78 (0.69–0.88)	<0.001*	0.83 (0.74–0.94)	0.004*			
65+	1.13 (0.95–1.34)	0.174	0.90 (0.74–1.11)	0.335			

[1] Includes results from six sites that provided information on age at the patient level — Howard Brown, Nashville, New York City, Orange County, Monroe County, and Seattle & King County

[2] Adjusted for site location

*Statistically significant at P <0.05

Table 14: Differences in characteristics between patients receiving express services, compared with those receiving non-express services, across 12 sites in six U.S. cities, during a six-month period from 2018–2019

	Logistic Regressions				Chi-Square Test		
	Crude OR (95% CI)	P-value	Adjusted OR[1] (95% CI)	Adjusted p-value	Chi-square	DF	P-value
Race[2]							
African American/ Black	Reference group				86.27	5	<0.001*
White	0.82 (0.77–0.86)	<0.001*	1.34 (1.26–1.42)	<0.001*			
Asian/Native Hawaiian or Other Pacific Islander	1.01 (0.92–1.11)	0.844	1.32 (1.19–1.45)	<0.001*			
American Indian/ Alaska Native	0.80 (0.63–1.01)	0.063	0.89 (0.70–1.13)	0.341			
Multiracial	0.63 (0.45–0.87)	0.006*	0.74 (0.50–1.10)	0.139			
Other	1.07 (1.00–1.13)	0.039*	0.98 (0.92–1.05)	0.593			
Ethnicity[2]							
Hispanic/Latinx	0.78 (0.74–0.82)	<0.001*	0.85 (0.80–0.90)	<0.001*	86.66	1	<0.001*

[1] Adjusted for site location

[2] Includes results from six sites that provided information on race at the patient level — Howard Brown, Nashville, New York City, Orange County, Monroe County, and Seattle & King County

*Statistically significant at P <0.05

Table 15: Differences in characteristics between patients receiving express services, compared with those receiving non-express services, across 12 sites in six U.S. cities, during a six-month period from 2018–2019

	Logistic Regressions				Chi-square Test		
	Crude OR (95% CI)	P-value	Adjusted OR[1] (95% CI)	Adjusted p-value	Chi-square	DF	P-value
Speaks a language other than English[2]	0.88 (0.83–0.95)	<0.001*	0.83 (0.77–0.89)	<0.001*	11.02	1	<0.001*
Insured[3]	0.79 (0.76–0.84)	<0.001*	0.86 (0.82–0.91)	<0.001*	76.62	1	<0.001*
Persons experiencing homelessness[4]	0.63 (0.56–0.70)	<0.001*	0.74 (0.66–0.82)	<0.001*	71.61	1	<0.001*
Reported substance use, any type[5]	0.99 (0.86–1.14)	0.897	0.95 (0.80–1.11)	0.492	0.02	1	0.90
Reported high-risk substance use[5]	1.19 (0.97–1.45)	0.092	1.25 (1.02–1.54)	0.032*	2.77	1	0.09
Reported injection drug use[6]	0.89 (0.37–2.12)	0.791	0.73 (0.30–1.74)	0.473	0.07	1	0.79
Transaction sex for money or drugs[5]	0.53 (0.32–0.87)	0.012*	0.59 (0.36–0.98)	0.042*	6.48	1	0.01*

[1] Adjusted for site location

[2] Includes results from six sites that provided information on language at the patient level — Howard Brown, Nashville, New York City, Orange County, Monroe County, and Seattle & King County

[3] Includes results from five sites that provided information on health insurance at the patient level — Howard Brown, Nashville, New York City, Monroe County, and Seattle & King County

[4] Includes results from four sites that provided information on homelessness at the patient level — Howard Brown, Nashville, New York City, and Seattle & King County

[5] Includes results from three sites that provided information on substance use at the patient level — Howard Brown, Orange City, and Seattle & King County

[6] Includes results from three sites that provided information on reported injection use at the patient level — Howard Brown, Nashville, and Orange County

*Statistically significant at P <0.05

Table 16: Differences in characteristics between patients receiving express services, compared with those receiving non-express services, across 12 sites in six U.S. cities, during a six-month period from 2018–2019

	Logistic Regressions				Chi-square Test		
	Crude OR (95% CI)	P-value	Adjusted OR[1] (95% CI)	Adjusted p-value	Chi-square	DF	P-value
Gender identity[2]							
Male	Reference group				161.89	4	<0.001*
Female	0.93 (.89–.98)	0.003*	0.84 (0.80–.89)	<0.001*			
Transgender persons	0.15 (0.10–0.21)	<0.001*	0.20 (0.14–.29)	<0.001*			
Non-binary/Genderqueer/ Gender Non-conforming	0.79 (0.56–1.11)	0.178	0.97 (0.68–1.39)	0.855			
Sexual orientation[3]							
Straight/Heterosexual	Reference group				131.97	6	<0.001*
Bisexual	0.64 (0.50–0.83)	<0.001*	0.65 (0.51–0.83)	<0.001*			
Queer	0.35 (0.23–0.53)	<0.001*	0.36 (0.24–0.54)	<0.001*			
Lesbian	0.31 (0.12–0.78)	0.012*	0.33 (0.13–0.84)	0.017*			
Gay	0.41 (0.34–0.49)	<0.001*	0.41 (0.34–0.49)	<0.001*			
Pansexual	0.90 (0.52–1.57)	0.664	0.86 (0.50–1.51)	0.589			
Other	0.08 (0.01–0.55)	0.010*	0.08 (0.01–0.55)	0.011*			

[1] Adjusted for site location

[2] Includes results from six sites that provided information on gender identity at the patient level — Howard Brown, Nashville, New York City, Orange County, Monroe County, and Seattle & King County

[3] Includes results from two sites that provided information on sexual orientation at the patient level — Howard Brown and Seattle & King County

*Statistically significant at P <0.05

Do express services attract new patients?

Table 17: New patients receiving express compared with non-express services across 11 sites in five U.S. cities, during a six-month period from 2018–2019

	Express (n=12,781)		Non-express (n=21,554)		Total (N=34,335)	
	n	%	n	%	N	%
New patient[1]	6,402	50.1	7,505	34.8	13,907	40.5

[1] Includes results from five sites that provided information on new patients who receive express services — Chicago, Nashville, New York City, Monroe County, and Seattle & King County

Table 18: Difference in new patients receiving express compared with non-express services across 11 sites in five U.S. cities, during a six-month period from 2018–2019

	Logistic Regressions				Chi-square Test		
	Crude OR (95% CI)	P-value	Adjusted OR[1] (95% CI)	Adjusted p-value	Chi-square	DF	P-value
New patient[2]	1.88 (1.80–1.96)	<0.001*	1.75 (1.67–1.82)	<0.001*	776.38	1	<0.001*

[1] Adjusted for site location

[2] Includes results from five sites that provided information on new patients who receive express service — Chicago, Nashville, New York City, Monroe County, and Seattle & King County

* Statistically significant at P <0.05

Table 19: New patients receiving express time period services compared with pre-express time period services across 4 sites in four U.S. cities, during a six-month period from 2016–2019[1]

	Express time period (n=10,731)		Pre-express time period (n=23,665)		Total (N=36,634)	
	n	%	n	%	N	%
New patient[1]	3,201	29.8	3,344	31.2	6,545	30.5

[1] Includes results from four sites that provided information on new patients and the pre-express time period — Howard Brown, Nashville, Orange County, and Seattle & King County

Table 20: Difference in new patients in the express time period compared with the pre-express time period across four sites in four U.S. cities, during a six-month period from 2016–2019

	Logistic Regressions				Chi-square Test		
	Crude OR (95% CI)	P-value	Adjusted OR[1] (95% CI)	Adjusted p-value	Chi-square	DF	P-value
New patient[2]	0.94 (0.89–0.99)	0.03*	0.93 (0.88–0.99)	0.018*	4.710	1	0.03*

[1] Adjusted for site location

[2] Includes results from four sites that provided information on new patients and the pre-express time period — Howard Brown, Nashville, Orange County, and Seattle & King County

* Statistically significant at P <0.05

Are new patients within the express time period from priority populations?

Table 21: Differences in characteristics between new patients compared with existing patients across 12 sites in six U.S. cities, during a six-month period from 2018–2019

	Logistic Regressions				Chi-square Test		
	Crude OR (95% CI)	P-value	Adjusted OR[1] (95% CI)	Adjusted p-value	Chi-square	DF	P-value
Age[2]							
10-14	2.67 (1.33–5.33)	0.006*	2.79 (1.38–5.65)	0.004*	147.34	10	<0.001*
15-19	1.34 (1.23–1.45)	<0.001*	1.41 (1.29–1.53)	<0.001*			
20-24	1.15 (1.09–1.21)	<0.001*	1.21 (1.14–1.27)	<0.001*			
25-29	*Reference group*						
30-34	.95 (0.89–1.00)	0.067	0.94 (0.89–0.99)	0.040*			
35-39	0.89 (0.83–0.96)	0.001*	0.89 (0.83–0.96)	0.002*			
40-44	0.98 (0.90–1.06)	0.557	0.99 (0.91–1.07)	0.717			
45-54	0.92 (0.85–0.99)	0.019*	0.93 0.86–1.00)	0.061			
55-64	0.97 (0.88–1.07)	0.496	0.99 (0.89–1.09)	0.786			
65+	0.83 (0.70–0.98)	0.030*	0.88 (0.74–1.04)	0.130			

Left table

Race[2]							
African American/Black	Reference group						
White	1.42 (1.36–1.48)	<0.001*	1.71 (1.63–1.79)	<0.001*	486.78	5	<0.001*
Asian/Native Hawaiian or Other Pacific Islander	1.50 (1.38–1.63)	<0.001*	1.38 (1.37–1.61)	<0.001*			
American Indian/Alaska Native	1.17 (0.94–1.45)	0.162	1.07 (0.86–1.32)	0.559			
Multiracial	0.80 (0.61–1.05)	0.107	1.08 (0.82–1.42)	0.595			
Other	1.70 (1.60–1.80)	<0.001*	1.39 (1.31–1.48)	<0.001*			
Hispanic/Latinx[2]	**1.06 (1.01–1.11)**	**0.029***	**0.97 (0.92–1.02)**	**0.473**	**4.78**	**1**	**0.029***
Speaks English[2]	**1.23 (1.16–1.31)**	**<0.001***	**1.02 (0.96–1.09)**	**0.551**	**43.26**	**1**	**<0.001***
Health insurance[3]	**0.64 (0.61–0.67)**	**<0.001***	**0.58 (0.55–0.61)**	**<0.001***	**389.21**	**1**	**<0.001***
Persons experiencing homelessness[4]	**0.96 (0.88–1.05)**	**0.360**	**1.05 (0.96–1.15)**	**0.313**	**0.838**	**1**	**0.361**
Reported substance use, any type[5]	**0.72 (0.65–0.79)**	**<0.001***	**0.72 (0.65–0.81)**	**<0.001***	**46.52**	**1**	**<0.001***
Reported high-risk substance use[5]	**1.08 (0.94–1.25)**	**0.276**	**1.04 (0.90–1.20)**	**0.623**	**1.24**	**1**	**0.273**
Reported injection drug use[6]	**1.03 (0.57–1.86)**	**0.932**	**0.97 (0.54–1.76)**	**0.928**	**0.01**	**1**	**0.931**
Transactional sex[5]	**1.14 (0.89–1.4)**	**0.310**	**0.92 (0.71–1.18)**	**0.504**	**1.03**	**1**	**0.310**
Gender identity[2]							
Male	Reference group						
Female	1.18 (1.14–1.23)	<0.001*	1.20 (1.15–1.25)	<0.001*	177.97	4	<0.001*
Transgender persons	0.35 (0.28–0.44)	<0.001*	0.44 (0.35–0.56)	<0.001*			
Non-binary/Genderqueer/Gender Non-conforming	0.98 (0.73–1.32)	0.909	1.05 (0.78–1.41)	0.746			
Other	1.68 (0.49–5.79)	0.415	1.87 (0.54–6.47)	0.326			

Right table

Sexual orientation[7]							
Straight/Heterosexual	Reference group						
Bisexual	0.53 (0.45–0.63)	<0.001*	0.56 (0.48–0.67)	<0.001*	493.07	6	<0.001*
Queer	0.35 (0.27–0.45)	<0.001*	0.39 (0.30–0.50)	<0.001*			
Lesbian	0.51 (0.31–0.85)	<0.001*	0.67 (0.40–1.12)	0.128			
Gay	0.29 (0.25–0.32)	<0.001*	0.28 (0.25–0.32)	<0.001*			
Pansexual	0.63 (0.40–1.01)	0.055	0.56 (0.35–0.90)	0.016*			
Other	0.60 (0.37–0.97)	0.038*	0.63 (0.38–1.02)	0.062			

[1] Adjusted for site location

[2] Includes results from six sites who provided information on gender identity at the patient level — Howard Brown, Nashville, New York City, Orange County, Monroe County, and Seattle & King County

[3] Includes results from five sites that provided information on health insurance at the patient level — Howard Brown, Nashville, New York City, Monroe County, and Seattle & King County

[4] Includes results from four sites that provided information on homelessness at the patient level — Howard Brown, Nashville, New York City, and Seattle & King County

[5] Includes results from three sites that provided information on transactional sex at the patient level — Howard Brown, Orange County, and Seattle & King County

[6] Includes results from three sites that provided information on reported injection use at the patient level — Howard Brown, Nashville, and Orange County

[7] Includes results from two sites that provided information on sexual orientation at the patient level — Howard Brown and Seattle & King County

* Statistically significant at P <0.05

Are patients from the express time period different from patients from the pre-express time period?

Table 22: Characteristics of unique patients who visited in the express time period and the pre-express time period across four sites in four U.S. cities, during a six-month period from 2016–2019[1]

	Express time period (n=10,731)		Pre-express time period (n=10,720)		Total (N=21,451)	
	n	%	n	%	n	%
Age[2]	**10,731**		**10,720**		**21,451**	
10–14	2	0.0	13	0.1	15	0.1
15–19	454	4.2	727	6.8	1,181	5.5
20–24	1,962	18.3	2,261	22.0	4,323	20.2
25–29	2,584	24.1	2,588	24.1	5,172	24.1
30–34	1,894	17.6	1,644	15.3	3,538	16.5
35–39	1,145	10.7	1,082	10.1	2,227	10.4
40–44	792	7.4	666	6.2	1,458	6.8
45–54	1,135	10.6	1,012	9.4	2,147	10.0
55–64	534	5.0	483	4.5	1,017	4.7
65+	229	2.1	143	1.3	372	1.7
Race[2]	**10,024**		**10,178**		**20,202**	
African American/Black	3,485	34.8	4,876	47.9	8,361	41.1
White	5,060	50.5	4,518	44.4	9,578	47.4
Asian/Native Hawaiian or Other Pacific Islander	794	7.9	439	4.3	1,233	6.1
American Indian/Alaska Native	79	0.8	38	0.4	117	0.6
Multiracial	132	1.3	65	0.6	197	1.0
Other	474	4.7	242	2.4	716	3.5
Ethnicity[2]	**7,383**		**3,748**		**11,131**	
Hispanic/Latinx	2,099	28.4	868	23.2	2,967	26.8

[1] Percentages may not add up to 100, due to rounding

[2] Includes results from four sites that provided information on age, race, ethnicity, and pre-express time period at the patient level — Howard Brown, Nashville, Orange County, and Seattle & King County

Table 23: Health insurance of unique patients who visited in the express time period and the pre-express time period across three sites in three U.S. cities, during a six-month period from 2016–2019[1]

	Express time period (n=8,305)		Pre-express time period (n=9,668)		Total (N=17,973)	
	n	%	n	%	N	%
Insured	3,561	42.9	2,832	29.3	6,393	35.6

[1] Includes results from three sites that provided information on health insurance and pre-express time period at the patient level — Howard Brown, Nashville, and Seattle & King County

Table 24: Gender identity and sexual orientation of unique patients who visited in the express time period and the pre-express time period across four sites in four U.S. cities, during a six-month period from 2016–2019[1]

	Express time period (n=10,731)		Pre-express time period (n=10,720)		Total (N=21,451)	
	n	%	n	%	n	%
Gender identity[2]	**10,387**		**10,225**		**20,612**	
Male	7,341	70.7	6,640	64.9	13,981	67.8
Female	2,583	24.9	3,427	33.5	6,010	29.2
Transgender persons	368	3.5	116	1.1	484	2.3
Non-binary/Genderqueer/ Gender Non-conforming	88	0.8	39	0.4	127	0.6
Other	7	0.1	3	0.0	10	0.0
Sexual orientation[3]	**4,788**		**2,711**		**7,499**	
Straight/Heterosexual	1,842	38.5	1,299	47.9	3,141	41.9
Bisexual	527	11.0	286	10.5	813	10.8
Queer	262	5.5	115	4.2	377	5.0
Lesbian	52	1.1	21	0.8	73	1.0
Gay	1,982	41.4	957	35.3	2,939	39.2
Pansexual	81	1.7	0	0.0	81	1.1
Other	42	0.9	33	1.2	75	1.0

[1] Percentages may not add up to 100, due to rounding

[2] Includes results from four sites that provided information on gender identity and pre-express time period at the patient level — Howard Brown, Nashville, Orange County, and Seattle & King County

[3] Includes results from two sites that provided information on sexual orientation and pre-express time period at the patient level — Howard Brown and Seattle & King County

Table 25: Substance use among unique patients who visited in the express time period and the pre-express time period across three sites in three U.S. cities, during a six-month period from 2016–2019

	Express time period (n=10,731)		Pre-express time period (n=10,720)		Total (N=21,451)	
	n	%	n	%	n	%
High-risk substance use	5,293		1,042		6,335	
Reported high-risk substance use[1]	684	6.4	441	4.1	1,125	5.2
Injection drug use	5,016		7,366		12,382	
Reported injection drug use[2]	41	0.8	15	0.2	56	0.5

[1] Includes results from three sites that provided information on cocaine, methamphetamine, heroin, and pre-express time period at the patient level — Howard Brown, Orange County, and Seattle & King County

[2] Includes results from three sites that provided information on reported injection use and pre-express time period at the patient level — Howard Brown, Nashville, and Orange County

Table 26: Reported ever transacting sex for money or drugs among unique patients who visited in the express time period and the pre-express time period across three sites in three U.S. cities, during a six-month period from 2016–2019

	Express time period (n=6,009)		Pre-express time period (n=3,179)		Total (N=9,188)	
	n	%	n	%	n	%
Reported ever transacting sex for money or drugs[1]	164	2.7	123	3.9	287	3.1

[1] Includes results from three sites that provided information on transactional sex and pre-express time period at the patient level — Howard Brown, Orange County, and Seattle & King County

Table 27: Differences in characteristics between unique patients who visited in the express time period and the pre-express time period across four sites in four U.S. cities, during a six-month period from 2016–2019

	Logistic Regressions				Chi-square Test		
	Crude OR (95% CI)	P-value	Adjusted OR[1] (95% CI)	Adjusted p-value	Chi-square	DF	P-value
Age[2]							
10-14	0.15 (0.04–0.68)	0.014*	0.15 (0.03–0.70)	0.015*	168.82	10	<0.001*
15-19	0.63 (0.55–0.71)	<0.001*	0.94 (0.82–1.09)	0.425			
20-24	0.83 (0.77–0.91)	<0.001*	0.99 (0.90–1.08)	0.731			
25-29			*Reference group*				
30-34	1.15 (1.06–1.26)	0.001*	1.08 (0.98–1.18)	0.125			
35-39	1.06 (0.96–1.17)	0.256	0.98 (0.88–1.09)	0.643			
40-44	1.19 (1.06–1.34)	0.003*	0.96 (0.86–1.07)	0.147			
45-54	1.12 (1.02–1.24)	0.024*	0.96 (0.86–1.07)	0.438			
55-64	1.11 (0.97–1.27)	0.142	0.94 (0.82–1.09)	0.429			
65+	1.60 (1.29–1.99)	<0.001*	1.56 (1.24–1.97)	<0.001*			
Race[2]							
White			*Reference group*				
African American/Black	0.64 (0.60–0.68)	<0.001*	0.96 (0.89–1.03)	0.241	475.48	5	<0.001*
Asian/Native Hawaiian or Other Pacific Islander	1.62 (1.43–1.83)	<0.001*	1.12 (0.99–1.28)	0.80			
American Indian/Alaska Native	1.86 (1.26–2.74)	0.002*	1.28 (0.87–1.91)	0.224			
Multiracial	1.81 (1.34–2.45)	<0.001*	1.28 (0.94–1.73)	0.129			
Other	1.75 (1.49–2.05)	<0.001*	1.69 (1.42–2.03)	<0.001*			
Hispanic/Latinx[2]	1.32 (1.20–1.44)	<0.001*	1.08 (0.97–1.20)	0.155	35.33	1	<0.001*
Health insurance[3]	1.81 (1.70–1.93)	<0.001*	1.85 (1.74–1.96)	<0.001*	359.77	1	<0.001*

Reported high-risk substance use[4]	1.59 (1.40–1.79)	<0.001*	1.39 (1.22–1.58)	<0.001*	515.24	1	<0.001*
Reported injection drug use[3]	4.04 (2.23–7.30)	<0.001*	2.25 (1.17–4.33)	0.015*	24.97	1	<0.001*
Transactional sex[5]	0.70 (0.55–0.88)	0.003*	0.63 (0.49–0.82)	<0.001*	8.93	1	0.003*
Gender identity[2]							
Male	*Reference group*				304.13	4	<0.001*
Female	0.68 (0.64–0.73)	<0.001*	0.93 (0.87–0.99)	0.038*			
Transgender persons	2.87 (2.38–3.55)	<0.001*	1.06 (0.84–1.34)	0.599			
Non-binary/ Genderqueer/Gender Non-conforming	2.04 (1.40–2.98)	<0.001*	1.23 (0.84–1.80)	0.301			
Other	2.11 (0.55–8.17)	0.284	1.39 (0.36–5.41)	0.647			
Sexual orientation[6]							
Straight/Heterosexual	*Reference group*				108.40	6	<0.001*
Bisexual	1.29 (1.12–1.53)	0.001*	1.19 (1.01–1.40)	0.038*			
Queer	1.61 (1.28–2.02)	<0.001*	1.36 (1.08–1.72)	0.010*			
Lesbian	1.75 (1.05–2.91)	0.033*	1.20 (0.72–2.02)	0.495			
Gay	1.46 (1.32–1.62)	<0.001*	1.44 (1.29–1.60)	<0.001*			
Pansexual	1.29E8 (1.29E8–1.29E8)	NA	1.27E8 (1.27E8-1.27E8)	NA			
Other	0.90 (0.57–1.42)	0.656	0.82 (0.52–1.31)	0.412			

[1] Adjusted for site location

[2] Includes results from four sites that provided information on age, race, ethnicity, gender identity, and pre-express time period at the patient level — Howard Brown, Nashville, Orange County, and Seattle & King County

[3] Includes results from three sites that provided information on health insurance and pre-express time period at the patient level — Howard Brown, Nashville, and Seattle & King County

[4] Includes results from three sites that provided information on cocaine, methamphetamine, heroin, and pre-express time period at the patient level — Howard Brown, Orange County, and Seattle & King County

[5] Includes results from three sites that provided information on transactional sex and pre-express time period at the patient level — Howard Brown, Orange County, and Seattle & King County

[6] Includes results from two sites that provided information on sexual orientation and pre-express time at the patient level — Howard Brown and Seattle & King County

* Statistically significant at P <0.05

How often do patients receive express services?

Table 28: Number of visits per patient across 12 sites in six U.S. cities, during a six-month period from 2018-2019

	Express (n=14,490)		Non-express (n=31,403)		Total (N=45,893)	
	Mean	**SD**	**Mean**	**SD**	**Mean**	**SD**
Number of visits per patient[1]	1.1	0.3	2.1	1.8	1.8	1.5

[1] Includes results from six sites that provided information on number of visits per patient — Howard Brown, Nashville, New York City, Orange County, Monroe County, and Seattle & King County

Table 29: Difference in the number of visits per patient across 12 sites in six U.S. cities, during a six-month period from 2018–2019

	Simple Linear Regression			Multiple Linear Regression[1]			T-Test		
	β	**R[2]**	**P-value**	**β**	**95% CI**	**P-value**	**Test Statistic[2]**	**DF**	**P-value[3]**
Number of visits per patient[4]	-0.998	0.089	<0.001*	-0.938	-0.97–-0.91	<0.001*	96.20	35429.77	<0.001*

[1] Adjusted for site location

[2] Equal variances not assumed

[3] Two-tailed test for equality of means

[4] Includes results from six sites that provided information on number of visits per patient — Howard Brown, Nashville, New York City, Orange County, Monroe County, and Seattle & King County

*Statistically significant at P <0.05

Capacity & Appointment Time

What effect do express services have on a site's capacity to see patients?

Table 30: Number of patient visits per day and site in express and non-express services across 12 sites in six U.S. cities, during a six-month period from 2018–2019

	Express (n=15,486)		Non-express (n=33,580)		Total (N=49,066)	
	Mean	**SD**	**Mean**	**SD**	**Mean**	**SD**
Number of visits per day[1]	22.7	37.5	46.8	55.5	34.9	51.1

[1] Includes results from six sites that provided information on the number of patient visits per day — Howard Brown, Nashville, New York City, Orange County, Monroe County, and Seattle & King County

Table 31: Number of patient visits per day and site in the express and pre-express time periods across four sites in four U.S. cities, during a six-month period from 2016–2019

	Express time period (n=13,673)		Pre-express time period (n=11,984)		Total (N=25,657)	
	Mean	**SD**	**Mean**	**SD**	**Mean**	**SD**
Number of visits per day[1]	25.5	11.3	22.7	17.6	24.1	14.8

[1] Includes results from four sites that provided information on the number of patient visits — Howard Brown, Nashville, Orange County, and Seattle & King County

Table 32: Number of patients turned away across three sites in three U.S. cities, during a six-month period from 2018–2019

	Total (N=2,048)	
	Mean	**SD**
Number of patients turned away per day[1]	6.9	7.8

[1] Includes results from three sites that provided information on the number of patients turned away per day — Denver, Orange County, and Monroe County

Table 33: Number of patients eligible for express services across three sites in three U.S. cities, during a six-month period from 2018–2019

	Express (n=1,235)		Non-express (n=4,785)		Total (N=5,993)	
	n	**%**	**n**	**%**	**N**	**%**
Number of patients eligible for express services[1]	1,018	82.4	343	7.2	1,361	22.7

[1] Includes results from three sites that provided information on the number of patients eligible for express services — Howard Brown, Orange County, and Seattle & King County

Table 34: Differences in the number of patient visits per day and site in express and non-express services across 12 sites in six U.S. cities, during a six-month period from 2018–2019

	Simple Linear Regression			Multiple Linear Regression[1]			T-Test		
	β	**R²**	**P-value**	**β**	**95% CI**	**P-value**	**Test Statistic[2]**	**DF**	**P-value[3]**
Number of visits per day[4]	-0.24	0.076	<0.001*	-0.31	-0.16 – -0.12	<0.001*	9.91	1,398.43	<0.001*

[1] Adjusted for site location

[2] Equal variances not assumed

[3] Two-tailed test for equality of means

[4] Includes results from six sites that provided information on the number of visits per day — Howard Brown, Nashville, New York City, Orange County, Monroe County, and Seattle & King County

*Statistically significant at P <0.05

Table 35: Differences in the number of patient visits per day during express and pre-express time periods across four sites in four U.S. cities, during a six-month period from 2016–2019

	Simple Linear Regression			Multiple Linear Regression			T-Test		
	β	**R²**	**P-value**	**β**	**95% CI**	**P-value**	**Test Statistic[2]**	**DF**	**P-value[3]**
Number of visits per day[4]	2.77	0.009	0.002*	3.21	2.00–4.41	<0.001*	-3.05	897.10	0.002*

[1] Adjusted for site location

[2] Equal variances not assumed

[3] Two-tailed test for equality of means

[4] Includes results from six sites that provided information on number of visits per day — Howard Brown, Nashville, New York City, Orange County, Monroe County, and Seattle & King County

*Statistically significant at P <0.05

Table 36: Differences in the number of patients eligible for express services across three sites in three U.S. cities, during a six-month period from 2018–2019

	Logistic Regressions				Chi-square Test		
	Crude OR (95% CI)	P-value	Adjusted OR[1] (95% CI)	Adjusted p-value	Chi-square	DF	P-value
Number of patients eligible for express services[2]	60.38 (50.28–72.52)	<0.001*	59.55 (49.57–71.55)	<0.001*	3160.67	1	<0.001*

[1] Adjusted for site location

[2] Includes results from three sites that provided information on patients eligible for express services — Howard Brown, Orange County, and Seattle & King County

*Statistically significant at P <0.05

What effect do express services have on appointment time?

Table 37: Average time points for express and non-express visits across 13 sites in seven U.S. cities, during a six-month period from 2018–2019

	Express (n=14,023)		Non-express (n=60,802)		Total (N=74,825)	
	Mean	SD	Mean	SD	Mean	SD
Minutes between arrival and departure (i.e., total appointment time)[1]	80.9	34	172.9	126	143.6	113

[1] Includes results from six sites that provided information on total appointment time — Chicago, Denver, New York City, Orange County, Monroe County, and Seattle & King County

Table 38: Differences in average time points between express and non-express visits across 13 sites in seven U.S. cities, during a six-month period from 2018–2019

	Simple Linear Regression			Multiple Linear Regression[1]			T-test		
	β	R[2]	P-value	β	95% CI	P-value	Test Statistic[2]	DF	P-value[3]
Minutes between arrival and departure (total appointment time)[4]	-90.83	0.183	<0.001*	-96.20	-98.22 – -94.17	<0.001*	106.07	30939.46	<0.001*

[1] Adjusted for site location

[2] Equal variances not assumed

[3] Two-tailed test for equality of means

[4] Includes results from six sites that provided information on total appointment time — Chicago, Nashville, New York City, Orange County, Monroe County, and Seattle & King County

*Statistically significant at P <0.05

Treatment

What are positivity rates of express patients compared to non-express patients?

Table 39: STI/HIV testing and test results among express and non-express patients across 12 sites in six U.S. cities, during a six-month period from 2018–2019

STI Testing & Results	Express (n=12,969)		Non-express (n=23,666)		Total (N=36,635)	
	n	%	n	%	N	%
STI testing						
Chlamydia						
Yes	11,799	91.0	18,631	78.7	30,430	83.1
No	1,170	9.0	5,035	21.3	6,205	16.9
Gonorrhea						
Yes	11,220	86.5	17,216	72.7	28,436	77.6
No	1,749	13.5	6,450	27.3	8,199	22.4
Syphilis						
Yes[1]	10,564	81.5	15,009	63.4	25,573	69.8
No	2,405	18.5	8,657	36.6	11,062	30.2
HIV						
Yes	11,010	84.9	13,632	57.6	24,642	67.3
No	1,959	15.1	10,034	42.4	11,993	32.7
Test results[2]						
Chlamydia[3]	**11,792**		**18,629**		**30,421**	
Positive	683	5.8	2,167	11.6	2,850	9.4
Gonorrhea[3]	**11,219**		**17,216**		**28,434**	
Positive	257	2.3	1,527	8.9	1,784	6.3
Syphilis[4]	**1,288**		**3,802**		**5,090**	
Positive	82	6.4	833	21.9	915	18.0
HIV[4]	**1,602**		**3,622**		**5,224**	
Positive	7	0.4	96	2.7	103	2.0

[1] Includes clients who only received RPR tests

[2] Percentages taken from the number of individuals who received testing for each STI of interest

[3] Column totals do not add to 100%. Inconclusive results were redacted, due to small sample size (n <10 individuals).

[4] Includes results from five sites — Howard Brown, Monroe County, Nashville, Orange County, and Seattle & King County. Excludes results from Denver and New York City, due to data sharing restrictions.

Table 40: Differences in STI/HIV testing and results between express and non-express patients across 12 sites in six U.S. cities, during a six-month period from 2018–2019

STI Testing & Results	Logistic Regressions				Chi-Square Test		
	Crude OR (95% CI)	P-value	Adjusted OR[1] (95% CI)	Adjusted p-value	Chi-square	DF	P-value
STI testing (yes)							
Chlamydia	2.73 (2.55–2.92)	< 0.001*	2.09 (1.95–2.24)	< 0.001*	894.2	1	< 0.001*
Gonorrhea	2.40 (2.27–2.56)		1.61 (1.50–1.71)		914.2		
Syphilis	2.53 (2.41–2.67)		1.90 (1.79–2.02)		1,292.9		
HIV	4.14 (3.92–4.37)		3.50 (3.29–3.72)		2,834.2		
Test results (positive)							
Chlamydia	0.47 (0.43–0.51)	< 0.001*	0.45 (0.41–0.49)	< 0.001*	290.1	1	< 0.001*
Gonorrhea	0.24 (0.21–0.28)		0.26 (0.22–0.29)		500.0		
Syphilis	0.24 (0.19–0.31)		0.45 (0.34–0.58)		157.6		
HIV	0.16 (0.08–0.35)		0.28 (0.13–0.61)		28.2		

[1] Adjusted for site location

* Statistically significant at P <0.05

Table 41: Chlamydia positivity by key characteristics among express and non-express patients across 12 sites in six U.S. cities, during a six-month period from 2018–2019

Chlamydia Positivity[1]	Express (n=683)		Non-express (n=2,167)		Total (N=2,850)	
	n	%	n	%	N	%
Characteristics						
Race[2]	681		2,141		2,822	
African American/Black	401	58.9	1,127	52.6	1,528	54.1
White	123	18.1	510	23.8	633	22.4
Asian/Native Hawaiian or Other Pacific Islander	46	6.8	140	6.5	186	6.6
Other	111	16.3	364	17.0	475	16.8
Ethnicity[3]	601		1,763		2,364	
Hispanic/Latinx	154	25.6	557	31.6	711	30.1
Gender identity[4]	655		2,155		2,810	
Male	454	69.3	1,633	75.8	2,087	74.3
Female	195	29.8	501	23.2	696	24.8
Neither male nor female[5]	6	0.9	21	1.0	27	1.0
Sexual orientation[6]	20		208		228	
Straight/Heterosexual	11	55.0	64	30.8	75	32.9
LGBTQ+	9	45.0	144	69.2	153	67.1
Age[7]						
29 years or younger	525	76.9	1,435	66.2	1,960	68.8
Older than 29 years	158	23.1	732	33.8	890	31.2

[1] Percentages may not add up to 100, due to rounding

[2] Includes results from six sites that provided data on race at the patient level — Howard Brown, Nashville, New York City, Orange County, Monroe County, and Seattle & King County

[3] Includes results from six sites that provided data on ethnicity at the patient level — Howard Brown, Nashville, New York City, Orange County, Monroe County, and Seattle & King County

[4] Includes results from six sites that provided data on gender identity at the patient level — Howard Brown, Nashville, New York City, Orange County, Monroe County, and Seattle & King County

[5] Includes all patients who reported anything other than male or female, including transgender persons, non-binary, genderqueer, and gender non-conforming

[6] Includes results from three sites that provided data on sexual orientation at the patient level — Howard Brown, Monroe County, and Seattle & King County

[7] Includes results from six sites that provided data on age at the patient level — Howard Brown, Nashville, New York City, Orange County, Monroe County, and Seattle & King County

Table 42: Differences in key characteristics among patients who tested positive for chlamydia between express and non-express patients across 12 sites in six U.S. cities, during a six-month period from 2018–2019

	Logistic Regressions				Chi-square Test		
	Crude OR (95% CI)	P-value	Adjusted OR[1] (95% CI)	Adjusted p-value	Chi-square	DF	P-value
Race							
African American/Black	*Reference group*				11.55	3	0.009*
White	0.68 (0.54-0.85)	0.001	0.99 (0.76-1.27)	0.911			
Asian/Native Hawaiian or Other Pacific Islander	0.92 (0.65-1.31)	0.657	0.86 (0.60-1.25)	0.427			
Other	0.86 (0.67-1.09)	0.210	1.24 (0.97-1.59)	0.089			
Ethnicity[2]							
Hispanic/Latinx	0.75 (0.61-0.92)	0.006	0.74 (0.60-0.91)	0.005	7.60	1	0.006*
Gender identity							
Male	*Reference group*				11.47	2	0.003*
Female	1.40 (1.15-1.70)	0.001	0.82 (0.67-1.01)	0.058			
Neither male nor female	1.03 (0.41-2.56)	0.953	1.08 (0.42-2.76)	0.880			
Sexual orientation[3]							
LGBTQ+	0.36 (0.14-0.92)	0.033	0.56 (0.20-1.56)	0.268	4.85	1	0.028*
Age[4]							
29 or less	1.70 (1.39-2.07)	<0.001	1.66 (1.36-2.03)	<0.001	27.41	1	<0.001*

[1] Adjusted for site location

[2] Compared with non-Hispanic/Latinx

[3] Compared with straight/heterosexual

[4] Compared with over 29 years old

* Statistically significant at P <0.05

Table 43: Gonorrhea positivity by key characteristics among express and non-express patients across 12 sites in six U.S. cities, during a six-month period from 2018–2019

Gonorrhea Positivity[1]	Express (n=257)		Non-express (n=1,527)		Total (N=1,784)	
	n	%	n	%	N	%
Characteristics						
Race[2]	**255**		**1,508**		**1,763**	
African American/Black	130	51.0	723	47.9	853	48.4
White	60	23.5	448	29.7	508	28.8
Asian/Native Hawaiian or Other Pacific Islander	15	5.9	80	5.3	95	5.4
Other	50	19.6	257	17.0	307	17.4
Ethnicity[3]	**231**		**1,351**		**1,582**	
Hispanic/Latinx	57	24.7	398	29.5	455	28.8
Gender identity[4]	**255**		**1,515**		**1,770**	
Male	217	85.1	1,320	87.1	1,537	86.8
Female	37	14.5	179	11.8	216	12.2
Neither male nor female[5]	–	–	16	1.1	17	1.0
Sexual orientation[6]	**9**		**213**		**222**	
Straight/Heterosexual	5	55.6	38	17.8	43	19.4
LGBTQ+	4	44.4	175	82.2	179	80.6
Age[7]						
Less than 29 years	169	65.8	813	53.2	982	55.0
More than 29 years	88	34.2	714	46.8	802	45.0

[1] Percentages may not add up to 100, due to rounding

[2] Includes results from six sites that provided data on race at the patient level — Howard Brown, Nashville, New York City, Orange County, Monroe County, and Seattle & King County

[3] Includes results from six sites that provided data on ethnicity at the patient level — Howard Brown, Nashville, New York City, Orange County, Monroe County, and Seattle & King County

[4] Includes results from six sites that provided data on gender identity at the patient level — Howard Brown, Nashville, New York City, Orange County, Monroe County, and Seattle & King County

[5] Includes all individuals who reported anything other than male or female, including transgender persons, non-binary, genderqueer, and gender non-conforming

[6] Includes results from three sites that provided data on sexual orientation at the patient level — Howard Brown, Monroe County, and Seattle & King County

[7] Includes results from six sites that provided data on age at the patient level — Howard Brown, Nashville, New York City, Orange County, Monroe County, and Seattle & King County

Table 44: Differences in key characteristics among patients who tested positive for gonorrhea between express and non-express patients across 12 sites in six U.S. cities, during a six-month period from 2018–2019

	Logistic Regressions				Chi-square Test		
	Crude OR (95% CI)	P-value	Adjusted OR[1] (95% CI)	Adjusted p-value	Chi-square	DF	P-value
Race[2]							
African American/Black	*Reference group*				4.27	3	0.234
White	–	–	–	–			
Asian/Native Hawaiian or Other Pacific Islander	–	–	–	–			
Other	–	–	–	–			
Ethnicity[2, 3]							
Hispanic/Latinx	–	–	–	–	2.20	1	0.138
Gender identity[2]							
Male	*Reference group*				2.40	2	0.301
Female	–	–	–	–			
Neither Male nor Female	–	–	–	–			
Sexual orientation[4, 5]							
LGBTQ+	–	–	–	–	–	–	0.015*
Age[6]							
29 or less	1.69 (1.28–2.22)	<0.001	1.60 (1.21–2.11)	0.001	13.93	1	<0.001*

[1] Adjusted for site location

[2] Regression not conducted as Chi-square test not significant

[3] Compared with non-Hispanic/Latinx

[4] Fisher's exact test conducted because fewer than five individuals were reported for one of the needed categories. Test statistics and degrees of freedom are not applicable. Regression not conducted, due to small sample size.

[5] Compared with straight/heterosexual

[6] Compared with over 29 years old

* Statistically significant at P <0.05

Table 45: HIV positivity by key characteristics among express and non-express patients across 12 sites in six U.S. cities, during a six-month period from 2018–2019

HIV Positivity[1]	Express (n=7)		Non-express (n=96)		Total (N=103)	
	n	%	n	%	N	%
Characteristics						
Race[2]	**7**		**90**		**97**	
African American/Black	3	42.9	21	23.3	24	24.7
White	2	28.6	51	56.7	53	54.6
Asian/Native Hawaiian or Other Pacific Islander	1	14.2	9	10.0	10	10.3
Other	1	14.2	9	10.0	10	10.3
Ethnicity[3]	**7**		**91**		**98**	
Hispanic/Latinx	3	42.9	41	45.1	44	44.9
Gender identity[4]			**91**		**98**	
Male	7	100.0	85	93.4	92	93.9
Female	0	0.0	5	5.5	5	5.1
Neither male nor female[5]	0	0.0	1	1.1	1	1.0
Sexual orientation[6]	**2**		**34**			
Straight/Heterosexual	0	0.0	4	11.8	4	11.1
LGBTQ+	2	100.0	30	88.2	32	88.9
Age[7]						
Less than 29 years	3	42.9	45	46.9	48	46.6
More than 29 years	4	57.1	51	53.1	55	53.4

[1] Percentages may not add up to 100, due to rounding

[2] Includes results from six sites that provided data on race at the patient level — Howard Brown, Nashville, New York City, Orange County, Monroe County, and Seattle & King County

[3] Includes results from six sites that provided data on ethnicity at the patient level — Howard Brown, Nashville, New York City, Orange County, Monroe County, and Seattle & King County

[4] Includes results from six sites that provided data on gender identity at the patient level — Howard Brown, Nashville, New York City, Orange County, Monroe County, and Seattle & King County

[5] Includes all individuals who reported anything other than male or female, including transgender persons, non-binary, genderqueer, and gender non-conforming

[6] Includes results from three sites that provided data on sexual orientation at the patient level — Howard Brown, Monroe County, and Seattle & King County

[7] Includes results from six sites that provided data on age at the patient level — Howard Brown, Nashville, New York City, Orange County, Monroe County, and Seattle & King County

Table 46: Differences in key characteristics among patients who tested positive for HIV between express and non-express patients across 12 sites in six U.S. cities, during a six-month period from 2018–2019

	Logistic Regressions				Chi-square Test		
	Crude OR (95% CI)	P-value	Adjusted OR[1] (95% CI)	Adjusted p-value	Chi-square	DF	P-value
Race[2]							
African American/Black	*Reference group*				2.17	3	0.538
White	–	–	–	–			
Asian/Native Hawaiian or Other Pacific Islander	–	–	–	–			
Other	–	–	–	–			
Ethnicity[2-4]							
Hispanic/Latinx	–	–	–	–	–	–	1.000
Gender identity[2-3]							
Male	*Reference group*				–	–	1.000
Female	–	–	–	–			
Neither Male nor Female	–	–	–	–			
Sexual orientation[2,5]							
LGBTQ+	–	–	–	–	0.27	1	0.607
Age[2-3, 6]							
29 or less	–	–	–	–	–	–	1.000

[1] Adjusted for site location

[2] Regression not conducted as Chi-square or Fisher's exact test not significant

[3] Fisher's exact test conducted because fewer than five individuals were reported for one of the needed categories. Test statistics and degrees of freedom are not applicable.

[4] Compared with non-Hispanic/Latinx

[5] Compared with straight/heterosexual

[6] Compared with over 29 years old

* Statistically significant at P <0.05

Table 47: Syphilis positivity by key characteristics among express and non-express patients across 12 sites in six U.S. cities, during a six-month period from 2018–2019

Syphilis Positivity[1]	Express (n=82)		Non-express (n=833)		Total (N=915)	
	n	%	n	%	N	%
Characteristics						
Race[2]	**79**		**786**		**865**	
African American/Black	22	27.8	139	17.7	161	18.6
White	40	50.6	475	60.4	515	59.5
Asian/Native Hawaiian or Other Pacific Islander	9	11.4	89	11.3	98	11.3
Other	8	10.1	83	10.6	91	10.5
Ethnicity[3]	**80**		**802**		**882**	
Hispanic/Latinx	28	35.0	378	47.1	406	46.0
Gender identity[4]	**70**		**815**		**885**	
Male	59	84.3	700	85.9	759	85.8
Female	9	12.9	103	12.6	112	12.7
Neither male nor female[5]	2	2.9	12	1.5	14	1.6
Sexual orientation[6]	**29**		**311**		**340**	
Straight/Heterosexual	4	13.8	27	8.7	31	9.1
LGBTQ+	25	86.2	284	91.3	309	90.9
Age[7]						
Less than 29 years	35	42.7	333	40.0	368	40.2
More than 29 years	47	55.3	500	60.0	547	59.8

[1] Percentages may not add up to 100, due to rounding

[2] Includes results from six sites that provided data on race at the patient level — Howard Brown, Nashville, New York City, Orange County, Monroe County, and Seattle & King County

[3] Includes results from six sites that provided data on ethnicity at the patient level — Howard Brown, Nashville, New York City, Orange County, Monroe County, and Seattle & King County

[4] Includes results from six sites that provided data on gender identity at the patient level — Howard Brown, Nashville, New York City, Orange County, Monroe County, and Seattle & King County

[5] Includes all individuals who reported anything other than male or female, including transgender persons, non-binary, genderqueer, and gender non-conforming

[6] Includes results from three sites that provided data on sexual orientation at the patient level — Howard Brown, Monroe County, and Seattle & King County

[7] Includes results from six sites that provided data on age at the patient level — Howard Brown, Nashville, New York City, Orange County, Monroe County, and Seattle & King County

Table 48: Differences in key characteristics among patients who tested positive for syphilis between express and non-express patients across 12 sites in six U.S. cities, during a six-month period from 2018–2019

	Logistic Regressions				Chi-square Test		
	Crude OR (95% CI)	P-value	Adjusted OR[1] (95% CI)	Adjusted p-value	Chi-square	DF	P-value
Race[2]							
African American/Black	*Reference group*				5.16	3	0.161
White	–	–	–	–			
Asian/Native Hawaiian or Other Pacific Islander	–	–	–	–			
Other	–	–	–	–			
Ethnicity[3]							
Hispanic/Latinx	0.60 (0.37-0.98)	0.039	0.73 (0.45-1.20)	0.215	4.31	1	0.038*
Gender identity[2]							
Male	*Reference group*				0.80	2	0.669
Female	–	–	–	–			
Neither male nor female	–	–	–	–			
Sexual orientation[2,4]							
LGBTQ+	–	–	–	–	0.84	1	0.360
Age[2,5]							
29 or less	–	–	–	–	0.23	1	0.633

[1] Adjusted for site location

[2] Regression not conducted as Chi-square test not significant

[3] Compared with non-Hispanic/Latinx

[4] Compared with straight/heterosexual

[5] Compared with over 29 years old.

* Statistically significant at P <0.05

What effect do express services have on treatment?

Table 49: Treatment among express and non-express patients across 12 sites in six U.S. cities, during a six-month period from 2018–2019

Treatment outcomes[1]	Express (n=951)[2]		Non-express (n=3,999)[2]		Total (n=4,950)[2]	
	N	%	N	%	N	%
Returned for treatment[3]	**51**		**711**		**762**	
Yes	47	92.2	373	52.5	420	55.1
No	4	7.8	338	47.5	342	44.9
Treatment provided (yes)[4]						
Chlamydia	505	73.9	1979	91.3	2,484	87.2
Gonorrhea	200	77.8	1,376	90.1	1,576	88.3
Syphilis	15	18.3	256	30.7	271	29.6
HIV	2	28.6	38	39.6	40	38.8

[1] Percentages from those who tested positive for an STI or STIs of interest

[2] Total number of express, non-express, or both express and non-express patients who tested positive for any STI at their most recent visit

[3] Includes data from three sites (Nashville, Orange County, and Seattle & King County) that provided data regarding whether a follow-up visit was recommended or scheduled. The denominator for this variable includes all individuals who were recommended to return for a follow-up visit (Nashville) or who had a follow-up visit scheduled (Orange County and Seattle & King County). The numerator includes all patients who were reported as having received a follow-up visit.

[4] Includes all patients who were reported as having been prescribed or provided treatment, having initiated treatment, or who had a date for treatment initiation recorded within 14 days of the most recently recorded patient visit, among all individuals who tested positive for each STI.

Table 50: Differences in treatment between express and non-express patients across 12 sites in six U.S. cities, during a selected six-month period from 2018–2019

Treatment outcomes	Logistic Regressions				Chi-Square Test		
	Crude OR (95% CI)	P-value	Adjusted OR[1] (95% CI)	Adjusted p-value	Test statistic	DF	P-value
Returned for treatment (yes)[2]	10.65 (3.80-29.87)	< 0.001*	16.75 (5.82-48.18)	< 0.001*	–	–	< 0.001*
Treatment provided/initiated (yes)							
Chlamydia	0.27 (0.22-0.34)	< 0.001*	0.25 (0.19-0.33)	< 0.001*	140.2	1	< 0.001*
Gonorrhea	0.39 (0.27-0.54)		0.35 (0.24-0.51)		32.3		
Syphilis	0.51 (0.28-0.90)	0.021*	0.65 (0.35-1.19)	0.162	5.5		
HIV[2]	0.61 (0.11-3.31)	0.567	0.32 (0.04-2.34)	0.260	–	–	0.70

[1] Adjusted for site location

[2] Fisher's exact test conducted because fewer than five individuals were reported for one of the needed categories. Test statistics and degrees of freedom are not applicable.

* Statistically significant at P <0.05

What effect do express services have on time to treatment initiation?

Table 51: Time to treatment among express and non-express patients across 12 sites in six U.S. cities, during a selected six-month period from 2018–2019

Treatment outcomes[1]	Express		Non-express		Total	
	Mean	SD	Mean	SD	Mean	SD
Days between STI testing and test result[2-3]						
Chlamydia	3.0	1.6	1.3	1.8	1.2	1.8
Gonorrhea	2.8	1.7	2.2	2.0	1.5	1.9
Syphilis	2.3	1.3	1.7	1.2	1.0	1.3
HIV	2.0	1.5	1.8	1.6	1.0	1.4
Days between STI testing and treatment initiation[4]						
Chlamydia	6.6	3.0	0.2	1.4	1.5	3.2
Gonorrhea	6.1	3.1	0.1	0.9	0.8	2.4
Syphilis	0.8	2.3	0.6	2.1	0.7	2.1
HIV	–	–	0.4	1.8	0.7	1.9
Days between test result and treatment initiation[5]						
Chlamydia	2.8	2.8	0.1	0.9	0.7	1.9
Gonorrhea	2.2	3.1	-3.5	2.0	-2.6	3.0
Syphilis	0.0	1.7	-1.0	2.4	-0.6	2.3
HIV	–	–	-0.7	2.4	-0.2	2.2

[1] Data were assessed, if within 14 days of the patient's most recent visit date

[2] The day a patient was tested was determined by the most recent visit from which the patient had a record of receiving a test within the six-month period. If the most recent visit was a follow-up visit, then the visit prior to the most recent visit was assumed to be the day a patient was tested.

[3] The sample sizes of unique patients providing data for days between testing and result posted for each STI were as follows (express, non-express, total): chlamydia (1,793, 5,594, 7,387); gonorrhea (1,434, 5,068, 6,502); syphilis (1,268, 3,904, 5,172); HIV (665, 3,426, 4,091).

[4] The sample sizes of unique patients providing data for days between testing and treatment provision/initiation for each STI were as follows (express, non-express, total): chlamydia (490, 1,735, 2,225); gonorrhea: (187, 1,259, 1,446); syphilis (9, 131, 140); HIV (1, 24, 25).

[5] The sample sizes of unique patients providing data for days between result posted and treatment provision/initiation for each STI were as follows: chlamydia (490, 1,726, 2,216); gonorrhea (191, 1,069, 1,260); syphilis (3, 105, 108); HIV (19 express only).

Table 52: Differences in time to treatment between express and non-express patients across 12 sites in six U.S. cities, during a selected six-month period from 2018–2019

Treatment outcomes[1]	Simple Linear Regression			Multiple Linear Regression[2]			T-Test		
	β	R2	P-value	β	95% CI	P-value	Test Statistic[3]	DF	P-value[4]
Days between testing and result[5]									
Chlamydia	1.73	0.15	<0.001*	1.48	1.40–1.57	<0.001*	36.25	7,385	<0.001*
Gonorrhea	0.57	0.02		0.25	0.15–0.36		9.93	6,500	
Syphilis	0.64	0.05		0.57	0.49–0.65		15.87	5,170	
HIV	0.20	0.00	0.002*	0.02	-0.11–0.15	0.733	3.08	4,089	0.002*
Days between testing and treatment initiation[5]									
Chlamydia	6.35	0.67	<0.001*	6.37	6.18–6.56	<0.001*	66.5	2,223	<0.001*
Gonorrhea	5.99	0.67		5.98	5.76–6.20		53.9	1,444	
Syphilis	0.21	0.00	0.774	0.44	-0.96–1.84	0.533	0.29	138	0.774
HIV	–	–	–	–	–	–	–	–	–
Days between result and treatment initiation									
Chlamydia	2.65	0.35	<0.001*	2.67	2.52–2.82	<0.001*	34.3	2,214	0.001*
Gonorrhea	5.69	0.46		5.59	5.25–5.93		32.8	1,258	
Syphilis	1.01	0.01	0.477	0.75	-2.04–3.55	0.594	0.71	106	0.477
HIV	–	–	–	–	–	–	–	–	–

[1] Data were assessed, if within 14 days of the patient's most recent visit date

[2] Adjusted for site location

[3] Equal variances assumed

[4] Two-tailed test for equality of means

[5] Testing day was assumed to be the patient visit day on which tests occurred

* Statistically significant with a P <0.05

Are express patients provided EPT at follow up?

Table 53: EPT provision among express and non-express patients who tested positive for chlamydia or gonor-rhea across three sites in three U.S. cities, during a selected six-month period from 2018–2019

EPT outcomes[1]	Express (n=870)		Non-express (n=3,200)		Total (n=4,070)	
	n	%	n	%	N	%
EPT prescribed/provided (yes)	12	1.4	107	3.3	119	2.9

[1] Includes results from three sites that provided information on EPT prescriptions and/or provision — Monroe County, Nashville, and Seattle & King County. Percentages are based on the total number of patients from these three sites that tested positive for chlamydia, gonorrhea, or both.

What effect do express services have on PrEP uptake?

Table 54: PrEP use and uptake among express and non-express patients across three sites in three U.S. cities, during a selected six-month period from 2018–2019

PrEP outcomes[1]	Express (n=1,235)		Non-express (n=6,234)		Total (n=7,469)	
	n	%	N	%	N	%
Patients currently on PrEP (yes)	80	6.5	1,025	16.4	1,105	14.8
Patients provided PrEP counseling (yes)	329	26.6	306	4.9	635	8.5
PrEP counseling appointment scheduled (yes)	6	0.5	66	10.6	72	1.0
Patients who initiated PrEP during appointment (yes)	5	0.4	106	17.0	111	1.5

[1] Includes results from three sites that provided information on PrEP use and uptake — Howard Brown, Orange County, and Seattle & King County. Percentages are based on the most recent visit for all unique express and non-express patients from these three sites.

Satisfaction

Table 55: Characteristics of patients who completed satisfaction surveys across 13 sites in seven distinct locations from September through November 2019

	Express (n=613)		Non-express (n=789)		Total (n=1,402)	
	n	%	n	%	N	%
Denver	53	8.6	89	11.3	142	10.1
Howard Brown	43	7.0	0	0.0	43	3.1
Nashville	95	15.5	146	18.5	241	17.2
New York City	141	23.0	259	32.8	400	28.5
Orange County	122	19.9	79	10.0	201	14.3
Monroe County	103	16.8	112	14.2	215	15.3
Seattle & King County	56	9.1	104	13.2	160	11.4

Table 56: Characteristics of patients who completed satisfaction surveys across 13 sites in seven distinct locations from September through November 2019

Satisfaction survey patient characteristics[1]	Express (n=571)		Non-express (n=633)		Total (N= 1,204)	
	n	%	n	%	N	%
<15	2	0.4	1	0.2	3	0.2
15-19	34	6.0	39	6.2	73	6.1
20-24	129	22.6	117	18.5	246	20.4
25-29	146	25.6	152	24	298	24.8
30-34	100	17.5	129	20.4	229	19.0
35-39	71	12.4	51	8.1	122	10.1
40-44	41	7.2	49	7.7	90	7.5
45-54	28	4.9	62	9.8	90	7.5
55-64	16	2.8	27	4.3	43	3.6
65+	4	0.7	6	0.9	10	0.8

[1] Percentages may not add up to 100, due to rounding

Table 57: Characteristics of patients who completed satisfaction surveys across 13 sites in seven distinct locations from September through November 2019

Satisfaction survey patient characteristics[1]	Express		Non-express		Total	
	n	%	n	%	N	%
Race	**550**		**611**		**1,161**	
African American/Black	200	36.4	247	40.4	447	38.5
White	172	28.1	195	31.9	367	31.6
Asian	35	6.4	36	5.9	71	6.1
Native Hawaiian/Other Pacific Islander	4	0.7	4	0.7	8	0.7
American Indian/Alaska Native	8	1.5	4	0.7	12	1.0
Multiracial	22	4.0	24	3.9	46	3.9
Other	87	15.8	77	12.6	164	14.1
Prefer not to say	22	4.0	24	3.9	46	4.0
Ethnicity	**478**		**567**		**1,045**	
Hispanic/Latinx or Spanish origin	157	32.8	164	28.9	321	30.7

[1] Percentages may not add up to 100, due to rounding

Table 58: Characteristics of patients who completed satisfaction surveys across 13 sites in seven distinct locations from September through November 2019

Satisfaction survey patient characteristics[1]	Express		Non-express		Total	
	n	%	n	%	N	%
Gender identity	**576**		**645**		**1,221**	
Female	159	27.6	194	30.1	353	8.9
Male	401	69.6	440	68.2	841	68.9
Non-binary/Transgender persons/Gender non-conforming/Prefer not to say	16	2.8	11	1.8	27	2.2
Sex assigned at birth	**576**		**643**		**1,219**	
Female	159	27.6	197	30.6	356	29.2
Male	415	72.0	443	68.9	858	70.4
Prefer not to say	2	0.3	3	0.5	5	0.4
Sexual orientation	**387**		**454**		**841**	
Straight/Heterosexual	177	45.7	227	50.0	404	48.0
Gay/Lesbian/Same gender loving	133	34.4	151	33.3	284	33.8
Bisexual	59	15.2	60	13.2	119	14.1
Queer/questioning/unsure/Not listed/Prefer not to say	18	4.6	16	3.5	34	4.0

[1] Percentages may not add up to 100, due to rounding

Table 59: Characteristics of patients who completed satisfaction surveys across 13 sites in seven distinct locations from September through November 2019

Satisfaction survey patient characteristics	Express (n=613)		Non-express (n=789)		Total (n=1,402)	
	n	%	n	%	N	%
Language in which survey completed						
English	597	97.4	758	96.1	1,355	96.6
Spanish	16	2.6	31	3.9	47	3.4

To what extent are patients satisfied with express services?

To what extent are patients comfortable with the staff and clinic environment?

Table 60: Satisfaction and comfort with clinic environment among survey respondents across seven sites from September through November 2019

Satisfaction survey questions and responses[1]	Express		Non-express		Total	
	n	%	n	%	N	%
The clinic hours are convenient for my schedule[2]	**565**		**775**		**1,340**	
Strongly agree	427	75.6	540	69.7	967	72.2
Somewhat agree	104	18.4	174	22.5	278	20.7
Somewhat disagree	19	3.4	34	4.4	53	4.0
Strongly disagree	11	1.9	19	2.5	30	2.2
No opinion/NA	4	0.7	8	1.0	12	0.9
The clinic is in a convenient location[3]	**412**		**516**		**928**	
Strongly agree	335	81.3	398	77.1	733	79.0
Somewhat agree	65	15.8	98	19.0	163	17.6
Somewhat disagree/Strongly disagree/No opinion/NA	12	2.9	20	3.9	32	3.5
The clinic setting makes me feel comfortable[4]	**270**		**255**		**525**	
Strongly agree	228	84.4	197	77.3	425	81.0
Somewhat agree	34	12.6	46	18.0	80	15.2
Somewhat disagree/Strongly disagree/No opinion/NA	8	3.0	12	4.7	20	3.8

[1] Percentages may not add up to 100, due to rounding

[2] Includes results from six sites that provided patient satisfaction data — Denver, Nashville, New York City, Orange County, Monroe County, and Seattle & King County

[3] Includes results from five sites that provided patient satisfaction data — Denver, Howard Brown, New York City, Orange County, and Seattle & King County

[4] Includes results from four sites that provided patient satisfaction data — Denver, Howard Brown, Orange County, and Seattle & King County

Table 61: Satisfaction with intake process among survey respondents across 13 sites in seven distinct locations from September through November 2019

Satisfaction survey questions and responses[1]	Express (n=364)		Non-express (n=508)		Total (N=872)	
	n	%	n	%	N	%
The intake process was clear[2]	**364**		**503**		**867**	
Strongly agree	315	86.5	422	83.1	737	84.5
Somewhat agree	41	11.3	70	13.8	111	12.7
Somewhat disagree/Strongly disagree/No opinion/NA	8	2.2	16	3.2	24	2.8

[1] Percentages may not add up to 100, due to rounding

[2] Includes results from four sites that provided patient satisfaction data — Denver, New York City, Orange County, and Seattle & King County

Table 62: Satisfaction with wait time and time spent with staff among survey respondents across 13 sites in seven distinct locations from September through November 2019

Satisfaction survey questions and responses[1]	Express		Non-express		Total	
	n	%	n	%	N	%
The length of time I waited was ok	**608**		**773**		**1,381**	
Strongly agree	481	79.1	512	66.2	993	71.9
Somewhat agree	99	16.3	192	24.8	291	21.1
Somewhat disagree/Strongly disagree/No opinion/NA	28	4.7	69	9.0	97	7.0
The amount of time I spent with staff during my visit felt right	**605**		**771**		**1,376**	
Strongly agree	545	90.1	664	86.1	1,209	87.9
Somewhat agree	54	8.9	94	12.2	148	10.8
Somewhat disagree/Strongly disagree/No opinion/NA	6	1.0	13	1.7	19	1.5

[1] Percentages may not add up to 100, due to rounding

Table 63: Satisfaction with staff among survey respondents across 13 sites in seven distinct locations from September through November 2019

Satisfaction survey questions and responses[1]	Express		Non-express		Total	
	n	%	n	%	N	%
I have confidence in the staff I met	**610**		**766**		**1,376**	
Strongly agree	579	94.9	702	91.6	1,281	93.1
Somewhat agree	28	4.6	52	6.8	80	5.8
Somewhat disagree/Strongly disagree/No opinion/NA	3	0.5	12	1.6	15	1.1
I felt respected during my time at the clinic	**607**		**768**		**1,375**	
Strongly agree	581	95.7	713	92.8	1,294	94.1
Somewhat agree	23	3.8	45	5.9	68	4.9
Somewhat disagree/Strongly disagree/No opinion/NA	3	0.5	10	1.3	13	0.9
The staff treated me with respect[2]	**228**		**257**		**485**	
Strongly agree	219	96.1	242	94.2	461	95.1
Somewhat agree	8	3.5	15	5.8	23	4.7
Somewhat disagree/Strongly disagree/No opinion/NA	1	0.4	0	0	1	0.2

[1] Percentages may not add up to 100, due to rounding

[2] Includes results from three sites that provided patient satisfaction data — Denver, Orange County, and Seattle & King County

Table 64: Satisfaction with services received among survey respondents across 13 sites in seven distinct locations from September through November 2019

Satisfaction survey questions and responses[1]	Express		Non-express		Total	
	n	%	n	%	N	%
The services I received addressed my needs	**610**		**770**		**1,380**	
Strongly agree	566	92.8	698	90.6	1,264	91.6
Somewhat agree	40	6.6	58	7.5	98	7.1
Somewhat disagree/Strongly disagree/No opinion/NA	4	0.7	14	1.8	18	1.3
I felt comfortable self-collecting samples[2]	**271**		**254**		**525**	
Strongly agree	241	88.9	211	83.1	452	86.1
Somewhat agree	21	7.7	19	7.5	40	7.6
Somewhat disagree/Strongly disagree/No opinion/NA	9	3.4	24	9.5	33	6.3

[1] Percentages may not add up to 100, due to rounding

[2] Includes results from four sites that provided patient satisfaction data — Denver, Howard Brown, Orange County, and Seattle & King County

Table 65: Satisfaction with information received among survey respondents across 13 sites in seven distinct locations from September through November 2019

Satisfaction survey questions and responses[1]	Express		Non-express		Total	
	n	%	N	%	N	%
It was easy to understand why I received the tests performed today[2]	**138**		**245**		**383**	
Strongly agree	133	96.4	225	91.8	358	93.5
Somewhat agree	5	3.6	18	7.3	23	6.0
Somewhat disagree/Strongly disagree/No opinion/NA	0	0.0	2	0.8	2	0.6
I was provided with information about why I needed certain tests[3]	**107**		**177**		**284**	
Strongly agree	99	92.5	163	92.1	262	92.3
Somewhat agree	7	6.5	10	5.6	17	6.0
Somewhat disagree/Strongly disagree/No opinion/NA	1	0.9	4	2.2	5	1.8
The instructions I was given to self-collect samples were easy to understand[4]	**228**		**253**		**481**	
Strongly agree	204	89.5	213	84.2	417	86.7
Somewhat agree	19	8.3	18	7.1	37	7.7
Somewhat disagree/Strongly disagree/No opinion/NA	5	2.2	22	8.7	27	5.8

[1] Percentages may not add up to 100, due to rounding

[2] Includes results from one site (New York) that provided patient satisfaction data.

[3] Includes results from two sites that provided patient satisfaction data — Denver and Seattle & King County

[4] Includes results from three sites that provided patient satisfaction data — Denver, Orange County, and Seattle & King County

Table 66: Overall satisfaction among survey respondents across 13 sites in seven distinct locations from September through November 2019

Satisfaction survey questions and responses[1]	Express		Non-express		Total	
	N	%	n	%	N	%
I felt in control over the services I received today[2]	**214**		**154**		**368**	
Strongly agree	203	94.9	130	84.4	333	90.5
Somewhat agree	11	5.1	20	13.0	31	8.4
Somewhat disagree/Strongly disagree/No opinion/NA	0	0.0	4	2.5	4	1.1
Overall, I am satisfied with my visit	**606**		**758**		**1,364**	
Strongly agree	574	94.7	683	90.1	1,257	92.2
Somewhat agree	31	5.1	60	7.9	91	6.7
Somewhat disagree/Strongly disagree/No opinion/NA	1	0.2	15	2.0	16	1.1

[1] Percentages may not add up to 100, due to rounding

[2] Includes results from three sites that provided patient satisfaction data — Denver, Howard Brown, and Orange County

Are there differences in patient satisfaction between those who do and do not receive express services?

Table 67: Differences in satisfaction between express and non-express survey respondents across 13 sites in seven distinct locations from September through November 2019

Satisfaction survey questions and responses[1]	Logistic Regressions				Chi-Square Test		
	Crude OR (95% CI)	P-value	Adjusted OR[2] (95% CI)	Adjusted p-value	Test statistic	DF	P-value
The clinic hours are convenient for my schedule	1.33 (0.86–2.06)	0.193	1.21 (0.78–1.89)	0.392	1.70	1	0.192
The clinic is in a convenient location	1.34 (0.65–2.78)	0.426	1.27 (0.59–2.73)	0.546	0.64		0.424
The length of time I waited was ok	2.03 (1.29–3.19)	0.002*	1.97 (1.24–3.12)	0.004*	9.73		0.002*
The intake process was clear	1.45 (0.61–3.42)	0.399	1.23 (0.52–2.95)	0.638	0.72		0.397
The amount of time I spent with staff during my visit felt right	1.71 (0.65–4.53)	0.279	1.47 (0.55–3.92)	0.443	1.20		0.273
The services I received addressed my needs[3]	2.81 (0.92–8.57)	0.070	5.26 (1.18–23.48)	0.030*	–		0.092
I have confidence in the staff I met[3]	3.22 (0.91–11.46)	0.071	3.13 (0.87–11.30)	0.082	–		0.068
I felt respected during my time at the clinic[3]	2.66 (0.73–9.69)	0.139	2.20 (0.60–8.09)	0.235	–		0.163
The clinic setting makes me feel comfortable	1.62 (0.65–4.02)	0.301	1.44 (0.52–3.98)	0.486	1.09		0.297
I felt comfortable self-collecting samples	3.04 (1.38–6.67)	0.006*	2.60 (1.12–6.02)	0.026*	8.36	1	0.004*
The instructions I was given to self-collect samples were easy to understand	4.25 (1.58–11.41)	0.004*	3.52 (1.29–9.62)	0.014*	9.57		0.002*
Overall, I am satisfied with my visit[3]	12.21 (1.61–92.73)	0.016*	10.84 (1.42–82.94)	0.022*	–		0.002*

[1] Express column indicates all survey respondents who agreed or strongly agreed with each satisfaction question listed. Totals for each question are outlined in Tables 44–50. Only questions with at least one response for each cell category in statistical tests were included in analyses.

[2] Adjusted for site location

[3] Fisher's exact test conducted because fewer than five individuals were reported for one of the needed categories. Test statistics and degrees of freedom are not applicable

*Statistically significant at P< 0.05

Table 68: Satisfaction by race among express and non-express patients across 13 sites in seven U.S. cities, during a six-month period from 2018–2019

Satisfaction indicator	Express (n=355)		Non-express (n=401)		Total (N=756)	
	n	%	n	%	N	%
Location convenient[1]	355		401		756	
African American/Black	94		135		229	
Agree	92	97.9	134	99.3	226	98.7
White	117		138		255	
Agree	114	97.4	132	95.7	246	96.5
Asian/Native Hawaiian or Other Pacific Islander	39		37		76	
Agree	38	97.4	31	83.8	69	90.8
Other	105		91		196	
Agree	102	97.1	90	98.9	192	98.0
Setting comfortable[2]	239		203		442	
African American/Black	37		31		68	
Agree	36	97.3	27	87.1	63	92.6
White	94		97		191	
Agree	92	97.9	93	95.9	185	96.9
Asian/Native Hawaiian or Other Pacific Islander	29		25		54	
Agree	28	96.6	23	92.0	51	94.4
Other	79		50		129	
Agree	76	96.2	49	98.0	125	96.9
Self-collect instructions clear[3]	200		202		402	
African American/Black	18		30		48	
Agree	17	94.4	30	100.0	47	97.9
White	86		98		184	
Agree	83	96.5	87	88.8	170	92.4
Asian/Native Hawaiian or Other Pacific Islander	27		25		52	
Agree	27	100.0	21	84.0	48	92.3
Other	69		49		118	
Agree	68	98.6	45	91.8	113	95.8

[1] Includes results from five sites that provided patient satisfaction data — Denver, Howard Brown, New York City, Orange County, and Seattle & King County

[2] Includes results from four sites that provided patient satisfaction data — Denver, Howard Brown, Orange County, and Seattle & King County

[3] Includes results from three sites that provided patient satisfaction data — Denver, Orange County, and Seattle & King County

Table 69: Differences in satisfaction by race between express and non-express patients across 13 sites in seven U.S. cities, during a six-month period from 2018–2019

	Logistic Regressions				Chi-square Test		
	Crude OR (95% CI)	P-value	Adjusted OR[1] (95% CI)	Adjusted p-value	Chi-square	DF	P-value
Location convenient (agree)							
African American/Black	*Reference group*				8.32	3	0.040*
White	1.26 (0.87-1.81)	0.218	0.82 (0.54-1.26)	0.372			
Asian/Native Hawaiian or Other Pacific Islander	1.79 (1.04-3.08)	0.037*	0.72 (0.39-1.32)	0.289			
Other	1.65 (1.12-2.43)	0.011*	0.83 (0.53-1.31)	0.427			
Setting comfortable (agree)[2]							
African American/Black	*Reference group*				3.87	3	0.275
White	–	–	–	–			
Asian/Native Hawaiian or Other Pacific Islander	–	–	–	–			
Other	–	–	–	–			
Self-collect instructions clear (agree)							
African American/Black	*Reference group*				8.75	3	0.033*
White	1.68 (0.86-3.28)	0.126	0.66 (0.33-1.29)	0.225			
Asian/Native Hawaiian or Other Pacific Islander	2.27 (0.99-5.17)	0.051	0.67 (0.28-1.61)	0.371			
Other	2.67 (1.32-5.39)	0.006*	0.65 (0.30-1.40)	0.269			

[1] Adjusted for site location

[2] Regression not conducted as Chi-square test not significant

* Statistically significant at P <0.05

Table 70: Satisfaction by sexual orientation among express and non-express patients across 13 sites in seven U.S. cities, during a six-month period from 2018–2019

Satisfaction indicator	Express (n=384)		Non-express (n=449)		Total (N=833)	
	n	%	n	%	N	%
Hours convenient[1]	**339**		**436**		**775**	
LGBTQ+	185		213		398	
Agree	172	93.0	186	87.3	358	89.9
Not LGBTQ	154		223		377	
Agree	141	91.6	209	93.7	350	92.8
Self-collect comfortable[2]	**260**		**224**		**484**	
LGBTQ+	163		123		286	
Agree	156	95.7	109	88.6	265	92.7
Not LGBTQ	97		101		198	
Agree	95	97.9	94	93.1	189	95.5

[1] Includes results from six sites that provided patient satisfaction data — Denver, Nashville, New York City, Orange County, Monroe County, and Seattle & King County

[2] Includes results from four sites that provided patient satisfaction data — Denver, Howard Brown, Orange County, and Seattle & King County

Table 71: Differences in satisfaction by sexual orientation among express and non-express patients across 13 sites in seven U.S. cities, during a six-month period from 2018–2019

	Logistic Regressions				Chi-square Test		
	Crude OR (95% CI)	P-value	Adjusted OR[1] (95% CI)	Adjusted p-value	Chi-square	DF	P-value
Hours convenient (agree)[2]							
LGBTQ+	1.35 (1.00–1.81)	0.052	0.85 (0.62–1.16)	0.297	4.32	1	0.038*
Not LGBTQ	*Reference Group*						
Self-collect comfortable (agree)[3,4]							
LGBTQ+	–	–	–	–	3.30	1	0.069
Not LGBTQ[2]	*Reference Group*						

[1] Adjusted for site location

[2] Compares those who agreed or strongly agreed that the hours were convenient among with those who were and were not LGBTQ+

[3] Compares those who agreed or strongly agreed that self-collecting samples was comfortable among with those who were and were not LGBTQ+

[4] Regression not conducted as Chi-square test not significant

* Statistically significant at P <0.05

Table 72: Satisfaction by age among express and non-express patients across 13 sites in seven U.S. cities, during a six-month period from 2018–2019

Satisfaction indicator	Express (n=387)		Non-express (n=443)		Total (N=830)	
	n	%	n	%	N	%
Location convenient[1]						
29 years or less	**202**		**216**		**418**	
Agree	194	96.0	207	95.6	401	95.9
More than 29 years	**185**		**227**		**412**	
Agree	183	98.9	222	97.8	405	98.3

[1] Includes results from five sites that provided patient satisfaction data — Denver, Howard Brown, New York City, Orange County, and Seattle & King County

Table 73: Differences in satisfaction by age among express and non-express patients across 13 sites in seven U.S. cities, during a six-month period from 2018–2019

	Logistic Regressions				Chi-square Test		
	Crude OR (95% CI)	P-value	Adjusted OR[1] (95% CI)	Adjusted p-value	Chi-square	DF	P-value
Location convenient (agree)[2-3]							
29 years or less	–	–	–	–	0.83	1	0.364
More than 29 years	*Reference Group*						

[1] Adjusted for site location

[2] Regression not conducted as Chi-square test not significant

[3] Compares those who agreed or strongly agreed that the location was convenient among with those 29 years or less and those more than 29 years

* Statistically significant at P <0.05

What factors do patients consider when choosing a clinic to receive testing?

Table 74: Factors considered by survey respondents when choosing a clinic across 13 sites in seven distinct locations from September through November 2019

Satisfaction survey questions and responses	Total (N=1,387)	
	n	%
What is most important to you when selecting a clinic to receive testing?[1]		
High quality care	527	38.0
Being treated with respect	500	36.0
Confidentiality	442	31.9
Wait time	405	29.2
Cost	396	28.6
Cleanliness	369	26.6
Convenient hours	341	24.6
Fast turnaround of results	317	22.9
Safety	302	21.8
Location of clinic	244	17.6
Availability of walk-in services	130	9.4
Other	8	0.6
Subgroup: What is most important to you when selecting a clinic to receive testing?[2]	170	
High quality care	40	23.5
Wait time	29	17.1
Availability of walk-in services	23	13.5
Being treated with respect	20	11.8
Location of clinic	20	11.8
Cost	18	10.6
Confidentiality	17	10.0
Fast turnaround of results	13	7.6
Safety	7	4.1
Convenient hours	5	2.9
Cleanliness	5	2.9
Other	2	1.2

[1] Numbers add up to more than 100%, because survey respondents were able to select or write-in more than one option
[2] Subgroup includes survey respondents who only selected one option as the most important factor when choosing a clinic

Table 75: Reasons for coming to the site among survey respondents across 13 sites in seven distinct locations from September through November 2019

Satisfaction survey questions and responses	Total (N=363)	
	n	%
Why did you come to this site today?[1]		
Cost	130	35.8
High quality care	125	34.4
Location of clinic	101	27.8
Being treated with respect	99	27.3
Convenient hours	92	25.3
Confidentiality	84	23.1
Fast turnaround of results	84	23.1
Safety	64	17.6
Wait time	59	16.3
Cleanliness	49	13.5
Other	29	8.0

[1] Numbers add up to more than 100%, because survey respondents were able to select or write-in more than one option

Table 76: Preferences for receiving testing results among survey respondents across 13 sites in seven distinct locations from September through November 2019

Satisfaction survey questions and responses	Total (N=391)	
	n	%
How do you prefer to receive testing results?[1-2]		
Phone call	191	48.8
Electronically through a patient portal	133	34.0
Text message	132	33.8
In person	58	14.8
Other	20	5.1

[1] Numbers add up to more than 100%, because survey respondents were able to select or write-in more than one option
[2] Includes results from three sites that provided patient satisfaction data — Howard Brown, Monroe County, and Seattle & King County

What can be improved about express visits?

Table 77: Reason for returning to the clinic among survey respondents across 13 sites in seven distinct locations from September through November 2019

Satisfaction survey questions and responses	Express		Non-express		Total	
	n	%	n	%	n	%
Have you received testing at this clinic before?	**271**		**244**		**515**	
Yes	188	69.4	164	67.2	352	68.3
No	83	30.6	80	32.8	163	31.7
Why did you come back to this clinic?[1]	**143**		**108**		**251**	
Good service, high quality care	28	19.6	24	22.2	52	20.7
The clinic is convenient	20	14.0	10	9.3	30	12.0
I feel safe, comfortable, trust this clinic, or feel respected	18	12.6	12	11.1	30	12.0
Staff	21	14.7	7	6.5	27	10.8
Location	19	13.3	7	6.5	26	10.4
Testing for STI's	6	4.2	18	16.7	24	9.6
For a check-up or new concern	14	9.8	8	7.4	22	8.8
Quick results or fast service	10	7.0	9	8.3	19	7.8
I am accustomed to this clinic	8	5.6	7	6.5	15	6.0
For PREP	14	9.8	0	0.0	14	5.8
Cost	6	4.2	6	5.6	12	4.8
I needed to back in order to follow-up or receive results	6	4.2	5	4.6	11	4.4
For treatment	–	–	–	–	6	2.4
Other[2]	–	–	–	–	8	3.2

[1] Numbers add to more than 100%, because respondents were able to select, or write-in, more than one option
[2] Other includes: "The hours are convenient to my schedule", "I was referred to this clinic", and "The facilities are clean"

Table 78: Likelihood of recommending the clinic to a friend among survey respondents across 13 sites in seven distinct locations from September through November 2019

Satisfaction survey questions and responses	Express (n=604)		Non-express (n=762)		Total (N=1,366)	
	n	%	n	%	n	%
On a scale from 1 to 10, how likely are you to recommend testing at this clinic to someone you know?						
1–2	4	0.7	4	0.5	8	0.6
3–4	3	0.5	4	0.5	7	0.5
5–6	6	1	9	1.2	15	1.1
7–8	43	7.1	85	11.2	128	9.4
9–10	548	90.7	660	86.6	1,208	88.4

Table 79: Suggestions for improving clinic services among survey respondents across 13 sites in seven distinct locations from September through November 2019

Satisfaction survey questions and responses	Total (N=201)	
	n	%
What can we do to improve our services?[1]		
No improvements	72	35.8
Offer longer hours	24	11.9
Improve facilities (clean, remodel, add bathrooms)	18	9.0
Improve wait time	16	8.0
Hire more staff, especially staff that reflects the clientele	12	6.0
Better communication skills for staff	9	4.5
Offer more services (more types of STD tests, women's health, more frequent testing)	7	3.5
Offer amenities (food, better entertainment)	5	2.5
Other[2]	38	18.9

[1] Numbers add up to more than 100%, because survey respondents were able to select or write-in more than one option
[2] Other includes "Improve turnaround time," "Improve phone service," "Better patient privacy," "More options in acquiring results," "Better communication regarding scheduling," "Ability to make appointments," "Consistent and accessible information," "Better coordination with pharmacies," and "Improve coordination at check-in"