Leveraging STI Express Services for HIV Prevention and Care

Hilary Reno, MD, PhD, Medical Consultant, CDC, DSTDP, Atlanta, GA
Molly Feder, MPH, Cardea, Seattle, WA
Elizabeth Menstell, MPH, Cardea, Seattle, WA
Christopher Ried, MD, Orange County Health Care Agency, California
Disclosures

The authors have nothing to disclose with regards to this presentation.

This project is supported with funding from the Centers for Disease Prevention and Control’s Division of STD Prevention.
Learning Objectives

• Review core elements of STI express services and different models of implementation
• Consider how STI express models could benefit priority populations and improve STI outcomes among Ryan White HIV/AIDS Program clients
• Discuss STI express services as an optimal tool for increasing access to HIV testing
Presentation Agenda

• Overview of STI express services
• Findings from recently completed multi-site evaluation of STI express services
• Experience implementing STI express services in an STI clinic co-located with a Ryan White clinic
Overview of STI Express Services

Hilary Reno, MD, PhD
Medical Consultant, CDC, DSTDP, Atlanta, GA

2020 National Ryan White Conference on HIV Care and Treatment
August 2020
The STI Landscape

STDs IN THE UNITED STATES

CHLAMYDIA 1,758,668
TOTAL CASES IN 2018
2.9% INCREASE SINCE 2017

GONORRHEA 583,405
TOTAL CASES IN 2018
5.0% INCREASE SINCE 2017

SYphilis 115,045
TOTAL CASES IN 2018
13.3% INCREASE SINCE 2017

ConGenITAL SYphilis 1,306
TOTAL CASES IN 2018
39.7% INCREASE SINCE 2017

Primary and secondARy SYphilis 35,063
TOTAL CASES IN 2018
14.4% INCREASE SINCE 2017

STDs tighten their grip on the nation’s health as rates increase for a fifth year.

Source: U.S. Centers for Disease Control and Prevention
The STI Funding/Infrastructure Landscape

- Fragmentation of funds and systems\(^1\)
- Declining or stagnant budgets primarily affecting DIS and STI partner services\(^2\)
- Reduced clinic hours, closures, reduced routine screenings\(^3\)

2. Sentinel Network
What are STI express services?

Definition: Triage-based STI testing without a full clinical examination

- Staffing models that allow health care professionals to operate at the top of their licenses
- Patient-self collection of swabs
- Technology and automation
STI Express Initiative

- Community of Practice
- In-Depth Assessments
- Data Collaborative
Diverse Models of Express Service Provision: Model A

1. Patients arrives, checks in, and completes kiosk
2. Computer algorithm triages patient to visit type
3. Print-out created and reviewed by nursing team
4. Screening only or screening-plus patients called back by MA
5. MA verifies patient responses and confirms screening only eligibility
6. MA draws blood for HIV and syphilis testing
7. Patient self collects Aptima specimens for gonorrhea and chlamydia testing
8. Patient receives results through patient portal, test results lines, or call from RN
Diverse Models of Express Service Provision: Model B

**Patient arrives and checks in at registration desk.**

A triage nurse triages patient to **full testing (blue)** or **fast track (green) visit**

**Fast Track Visit Criteria:**
- Asymptomatic Clients
- Asympt. Contacts
- Treatments
- Immigration
- Pregnancy Only

**Fast Track PHN provides services:**
- Rapid HIV
- History
- Blood
- Urine
- Education
- HIV Results
- Treatment (if applicable)

Patient calls to receive results 5 days after visit for urine, blood & swab specimens.

**Full Testing Visit Criteria:**
- Symptomatic Clients
- High Risk
- Opt-In

**Full Visit PHN provides services:**
- Rapid HIV
- History
- Blood
- Physical Exam
- Swab
- Urine
- Education
- HIV Results
- Presumptive Treatment

Patient receives results from stat lab the same day of visit, and calls back after 5 days for urine/blood results.
Motivations for Express Services

- **Improve clinic capacity**
  - Reduce turnaways
  - Reduce clinic clog
  - Gain staffing efficiencies
  - Reduce test turnaround time

- **Reduce unmet need**
  - Address stigma
  - Increase testing among priority populations
The findings and conclusions in this report are those of the authors and do not necessarily represent the official position of the Centers for Disease Control and Prevention.
Evaluating STI Express Services: Findings from a Multi-site Data Collaborative

Molly Feder, MPH
Elizabeth Menstell, MPH
Cardea Services
Cardea

• National, women of color-led organization with nearly 50 years of experience in research and evaluation, training, and capacity building

• Cardea envisions communities where all people, especially those who have been most underserved, have equitable access to quality health and human services

• Cardea seeks to improve organizations’ abilities to deliver accessible, high quality, culturally proficient, and compassionate services to their clients

• Cardea believes that organizations thrive by integrating principles of equity and social justice into all aspects of their work
What we did

In April 2019, NACCHO engaged 13 clinics in seven sites and Cardea, as the evaluation consultant, in a multi-jurisdiction data collaborative across seven sites to:

- Further establish the evidence base for STI express services
- Support quality improvement of established STI express models
What we hoped to learn

Do STI express services influence...

- Patient populations served by clinics?
- Clinic capacity or patient appointment time?
- STI testing, positivity or treatment?
- Satisfaction with clinic visits
- Costs per visit or appointment time? (CDC)
How we did it

Data abstraction and analysis

- Electronic medical record data
- Among patients who received express and non-express services, and before and after express implementation
- Most recent visits records to categorize into express/non-express patients

Patient satisfaction surveys

- Anonymous, paper and web-based
- Offered in English and Spanish
- Assessed on 5-point Likert scale
What we learned: Patients

STI express services may support *Ending the Epidemic* Initiatives

Comparing priority patients before and after STI express implementation, we learned that...

A significantly higher proportion of patients identified as gay, bisexual, or queer after STI express implementation

A significantly higher proportion of patients reported use of high risk and injection drugs after STI express implementation
What we learned: Capacity

STI express services increase clinic capacity to see patients

Average number of patient visits per day

- After implementation (n=13,673) = 26
- Before implementation (n=11,984) = 23
What we learned: Packaged Testing

STI express services increase opportunities for HIV/STI testing

- **Chlamydia**
  - Express: 90% (n=13,071)
  - Non-express: 79% (n=23,666)

- **Gonorrhea**
  - Express: 86% (n=13,071)
  - Non-express: 73% (n=23,666)

- **Syphilis**
  - Express: 81% (n=13,071)
  - Non-express: 63% (n=23,666)

- **HIV**
  - Express: 84% (n=13,071)
  - Non-express: 58% (n=23,666)
What we learned: Positivity

HIV/STI positivity was lower among express vs. non-express patients

<table>
<thead>
<tr>
<th></th>
<th>Express</th>
<th>Non-express</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chlamydia</td>
<td>6%</td>
<td>12%</td>
</tr>
<tr>
<td>Gonorrhea</td>
<td>2%</td>
<td>9%</td>
</tr>
<tr>
<td>Syphilis</td>
<td>6%</td>
<td>22%</td>
</tr>
<tr>
<td>HIV</td>
<td>0%</td>
<td>3%</td>
</tr>
</tbody>
</table>

Percentages taken from total number tested per group

<table>
<thead>
<tr>
<th></th>
<th>Express</th>
<th>Non-express</th>
</tr>
</thead>
<tbody>
<tr>
<td>Chlamydia</td>
<td>11,799</td>
<td>18,631</td>
</tr>
<tr>
<td>Gonorrhea</td>
<td>11,220</td>
<td>17,216</td>
</tr>
<tr>
<td>Syphilis</td>
<td>1,288</td>
<td>3,802</td>
</tr>
<tr>
<td>HIV</td>
<td>1,602</td>
<td>3,632</td>
</tr>
</tbody>
</table>
What we learned: PrEP

STI express services offer increased opportunities for PrEP consultation

At their most recent visit, express patients were more frequently provided with PrEP counseling, than non-express patients

Patients provided PrEP counseling

Express (n=1,235)  27%
Non-express (n=6,234)  5%
STI express services...

- Complement other clinical services and may be implemented across diverse settings and via multiple strategies
- May support *Ending the Epidemic* initiatives
- Increase clinic capacity to see patients
- Offer increased opportunities for HIV/STI testing and PrEP consultation
Implementing Express Services in an STI Clinic Co-Located with Ryan White HIV Services

Christopher Ried, MD
Medical Director for HIV/STD Services
Orange County Health Care Agency (CA)
Leveraging STI Express

- Orange County’s HIV and STD Clinics
  - Ryan White HIV Clinic is co-located with County’s categorical STD clinic
  - Clinics have been co-located since the 1980s
  - PrEP Clinic embedded in the STD Clinic
  - Rapid ART in HIV and STD Clinics
  - 3.0 FTE MD and 3.0 FTE NP
California RW Part B Clinical Quality Management program and the California Prevention Training Center pilot program to increase STD testing among HIV+ MSM

Validation study comparing provider collected vs patient-collected rectal, throat and vaginal GC/CT

Patient-collected specimens were as good if not better than provider-collected specimens and patients were pleased to be given the option

2018 HRSA Center for Quality Improvement and Innovation Award for validation study and implementation of self-swabbing
• Protocols written, patient-collected education materials created
• Restroom and two offices with sinks (mirrors installed) used for collection
• EHR configured to make one-click ordering for all self-collected specimens
• STD Express services named “Quick Check,” advertised on-line and in clinic
• Any asymptomatic patient who presents to clinic for screening is eligible for a Quick Check whether they are an HIV or STD clinic patient
Facilitating Orders

- Make ordering of self-collected specimens as easy as possible for providers
- Instant results in HIV Clinic: 1st quarter of implementing self-collected GC/CT specimens rectal screening increased 76% and throat screening increased 126% in the HIV clinic
Quick Check Packaged Testing

- Self-collected rectal, throat and vaginal GC/CT testing
- Urine testing for GC/CT if appropriate
- Syphilis testing, either reverse algorithm or RPR if previously infected
- HIV testing on ALL patients unless known positive via AgAb algorithm
When Additional Services are Needed

- Any Quick Check visit can become full STD visit with exam, gram stain of discharge, darkfield, STAT syphilis CIA or RPR, rapid TPPA POC, rapid HIV test POC, STAT HIV AgAb or STAT confirmatory Ab
- PrEP referral offered to all appropriate patients
  - PrEP clinic within County’s STD clinic for uninsured
  - Referral to PrEP navigation for insured patients
Self-Collection in HIV Clinic

• Successes:
  • January to June 2018 prior to self-collection:
    1182 throat and rectal GGCT specimens collected
  • January to June 2019 after 6 months of self-collection:
    3498 throat and rectal GC/CT, increase of 3X or 196%
Implementation in HIV Clinic

• Much quicker and easier for MD to order swabbing at MD visit or at phlebotomy visit 2 weeks prior to MD appointment
• DHHS guidelines: virally suppressed and stable CD4 monitoring extended to every 6-month intervals
• Most patients require interim STD screening at least every 3 months
• Patients instructed to present to STD clinic for “Quick Check” appointments between 6-month MD visits and as needed
Quick Check and HIV+ STD Clinic Patients

• Quick Check patients who report untreated HIV or who test positive are offered Linkage to Care on-site or LTC Referrals

• All uninsured and insured HIV+ patients are offered Rapid ART the same-day in the same clinic

• HIV patients who want STD screening at anytime between their regular doctor appointments can present for Quick Check
CBO Testing and Successes

• CBO Testing, February 2019
  • Began funding 3 CBOs to use our Quick Check model to do self-swab GC/CT, syphilis testing and HIV AgAb algorithm testing
  • CBOs had previously done rapid HIV testing but not GC/CT, syphilis or HIV AgAb screening

• Successes
  • Those tested at CBOs tended to be younger
  • CBO was able to test 3x as many patients 19-25 as the County clinic
  • Rectal CT positivity rate was 11% compared to County’s 17%
  • Rectal GC positivity rate was 5% compared to County’s 11%
CBO Testing Challenges

- CBO Testing, February 2019
  - Challenges
    - Few more days to get results and therefore time to treatment longer
    - Patients with a history of syphilis require a visit with MD/NP, usually at the County clinic
Overall Express Visit Challenges

- Limiting it to certain times and days of the week makes it less accessible
- Staffing shortages of RNs, using NPs not as cost-effective; MAs can’t work under standing orders in California
- Need to implement procedure to make any appropriate walk-in an Express Visit

COVID-19 Changes
- Limits on patients that can be in waiting room
- Implementing Express Visits for all PrEP follow-ups to limit patient time in clinic
Leveraging STI Express Services for HIV Prevention and Care

Hilary Reno, MD, PhD
STI Express Services + HIV Prevention and Care

- STI express services are being used in a variety of settings.
- Express services can increase clinic capacity, free up clinicians time, increase referrals for PrEP.
- Express services + packaged testing seem to increase the % of people tested for HIV.
- Express services can be integrated with rapid ART start programs.
Resources

- STI Express Implementation Toolkit
- STI Express Billing Fact Sheet
- Findings from the STI Express Data Collaborative
- CDC’s Recommendations for the Laboratory-based Detection of Chlamydia trachomatis and Neisseria gonorrhoea—2014.
- CDC funded National Network of STD Prevention Centers
National Network of STD Clinical Prevention Training Centers

- The National Network of STD Clinical Prevention Training Centers (NNPTC), funded by the CDC, assists clinicians with the skills, knowledge and experience needed to address and prevent STDs in their patients.

- Consisting of 8 regional centers and 2 national centers serving the United States, the network provides:
  - Over 100,000 total trainees in 2019
  - Over 600 In-Person Trainings Annually
  - Over 60 Web-based Trainings Annually
  - Free or Low-Cost CME and CNE
  - Technical Assistance to STD Clinics and Providers
  - Free STD Clinical Consultation
STD Clinical Consultation Network

No-cost online clinical consultation on the prevention, diagnosis, and treatment of STDs by your Regional PTC Clinical Faculty

www.STDCCN.org
Acknowledgements

- Data Collaborative sites
- Community of Practice members
- In-depth assessment participants
- Samantha Ritter
- Julia Zigman
- Wendy Nakatsukasa-Ono
- Molly Feder

- Lizzy Menstell
- Amanda Winters

- CDC DSTDP
  - Hilary Reno
  - Melissa Habel
  - Andres Berruti
Contact

Hilary Reno, MD, PhD, Medical Consultant, CDC, DSTDP, Atlanta, GA
hreno@wustl.edu

Molly Feder, MPH, Cardea
mfeder@cardeaservices.org

Elizabeth Menstell, MPH, Cardea
lmenstell@cardeaservices.org

Christopher Ried, MD
cried@ochca.com