

### Meeting People Where They Are: Treating HIV, HCV, SUD and Injection Drug Use





One of today's presenters has a relevant financial or non-financial interests to disclose.

Stacey Trooskin MD, PhD

- Receives grant/research support from: Gilead Sciences
- Is a member of the Advisory Board for: Gilead Sciences
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Commercial support was not received for this activity.



At the conclusion of this activity, participants will be able to:

1. Describe the American Association for the Study of Liver Diseases (AASLD) and Infectious Diseases Society of America (IDSA) treatment recommendations for hepatitis C;

 Describe how to make referrals to effective harm reduction services;
 Describe effective linkage to care models for people co-infected with HIV and hepatitis C; and

4. Understand where to locate additional resources related to treating hepatitis C among people with substance use disorder who inject drugs.



### Meeting People Where They Are: Treating HIV, HCV, SUD and Injection Drug Use

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## **Two Epidemics Intertwined**



 HCV antibody prevalence among people who inject drugs (PWID) is estimated to be 70% to 77%<sup>1</sup>



1 of 3 people who inject drugs acquires HCV infection in their first year of injecting<sup>2</sup>



45% to 85% of individuals chronically infected with HCV are unaware of their status<sup>1</sup>

CDC. Surveillance of Viral Hepatitis—United States, 2015. https://www.cdc.gov/hepatitis/statistics/2015surveillance/pdfs/2015HepSurveillanceRpt.pdf. Accessed August 2, 2018; 2. Hagan H, et al. *Am J Epidemiol.* 2008;168(10):1099-1109.

# Changing Trends in Acute HCV in the US (2001-2016)

- New acute HCV infection in 2016 (n=41,200)
- 3.5-fold increase in new cases since 2010
  - Increase reflects new infections associated with rising rates of injection-drug use
- Most newly acquired acute HCV infections
  - Young
  - White
  - PWIDs
  - Non-urban areas

CDC. Surveillance for viral hepatitis - United States, 2016. https://www.cdc.gov/hepatitis/statistics/2016surveillance/index.htm.

#### 3 Age group (years) 20-29 30-39 Rate (per 100,000 population) 2.5 40-49 50-59 ····· ≥60 2 1.5 0.5 2001 2004 2007 2010 2013 2016 Year



VIRTUAL

# Universal HCV screening in the US

#### VIRTUAL 2020 NATIO RYAN WH CONFERENCE HIV CARE & TREAT

#### Screening for Hepatitis C Virus (HCV) Infection

Chronic HCV is a common infection in the United States that can lead to liver failure, liver transplantation, and death. Antiviral treatment for HCV is highly effective in curing it.



#### Population

Adults aged 18 to 79 years (including pregnant persons) who do not have any signs or symptoms of HCV infection and who do not have known liver disease



#### **USPSTF** recommendation

The USPSTF recommends screening for HCV infection in adults aged 18 to 79 years.

#### Number of newly reported chronic HCV by sex and age, 2018



All persons with risk factors (eg, persons with HIV, prior recipients of blood transfusions, persons who ever injected drugs and shared needles, and persons who are born to an HCV-infected mother) should be tested for HCV, with periodic testing while risk factors persist

MMWR April 10, 2020 / 69(14);399–404; US Preventive Services Task Force. JAMA. 2020;323(10):970–975AMA 2020

### Management of HCV in PWID AASLD/IDSA Recommendations



#### **Recommendations for Screening and Treatment of HCV Infection in PWID**

Annual HCV testing is recommended for PWID with no prior testing, or past negative testing and subsequent injection drug use. Depending on the level of risk, more frequent testing may be indicated.	lla, C
Substance use disorder treatment programs and needle/syringe exchange programs should offer routine, opt-out HCV-antibody testing with reflexive or immediate confirmatory HCV-RNA testing and linkage to care for those who are infected.	lla, C
PWID should be counseled about measures to reduce the risk of HCV transmission to others.	I, C
PWID should be offered linkage to harm reduction services when available, including needle/syringe service programs and substance use disorder treatment programs.	I, B
Active or recent drug use or a concern for reinfection is not a contraindication to HCV treatment.	lla, B

#### **Recommendation for Testing for Reinfection in PWID**

<ul> <li>At least annual HCV-RNA testing is recommended for PWID with recent injection drug use after they have spontaneously cleared HCV infection or have been successfully treated.</li> </ul>	lla, C

## HCV Survivability and Transmissibility





Composite slide courtesy of Gregory Huhn, MD.

1. Paintsil E, et al. J Infect Dis. 2010;202(7):984 990; 2. Doerrbecker J, et al. J Infect Dis. 2011;204(12):1830 1838; 3. Thibault V, et al. J Infect Dis. 2011;204(12):1839 1842; 4. Doerrbecker J, et al. J Infect Dis. 2013;207(2):281 287; 5. Paintsil E, et al. J Infect Dis. 2014; 209(8):1205 1211; 6. Image source: http://qdsyringe.com/what are low dead-space syringes 2/. Accessed September 11, 2019.

### SSP Coverage Across the U.S.





 29,382 young individuals with HCV

- 15–29 years of age
- 80% live >10 miles from an SSP
- Median distance: 37 miles



Australian Annual Needle Syringe Program Survey: Annual N=1995–2380



Population-level evidence of decrease in prevalence of HCV viremia among group most at risk of ongoing transmission

Iversen J, et al. J Hepatol. 2019;70(1):33 39.

\*Untreated + treated (VF) + treated (reinfection).

VIRTUAL

## **Reinfection Considerations in PWID**



- After cure, HCV antibodies do not provide protection against reinfection
- Modeling studies indicate that MAT and treatment-as-prevention (TasP) strategies are important for slowing the rates of new infections and reinfections
  - HCV cure → decreased prevalence
  - Harm-reduction measures → decreased incidence
- Harm-reduction strategies such as DAA treatment of injecting partners (ie, *bring-a-friend* treatment strategy) may also be useful in reducing reinfection
- Access to treatment for HCV reinfection—without stigma and discrimination—is crucial: reinfection is not unique to PWID

# HCV Reinfection After SVR Among PWID

#### VIRTUAL 2020 NATIONAL RYAN WHITE CONFERENCE OF HIV CARE & TREATMEN

#### **MAT (Methadone; Buprenorphine)**

Study ID	HCV Reinfection Rate (95% CI)	% Weight	Study ID
Akiyama, 2018		1.30 (0.42, 4.04)	5.16
Backmund, 2004		4.24 (0.60, 30.10)	2.94
Bielen, 2018	•	2.56 (0.36, 18.20)	2.94
Bouscaillou, 2018		1.77 (0.11, 28.22)	1.79
Boyle, 2018		2.34 (0.33, 16.60)	2.94
Cuadrado, 2018		1.21 (0.08, 19.36)	1.79
Cunningham, 2018	•	1.21 (0.17, 8.58)	2.94
Deshaies, 2016		8.45 (2.73, 26.20)	5.16
Dore, 2017	•	1.33 (0.63, 2.78)	6.58
Fekhardt 2018	· · · · · · · · · · · · · · · · · · ·	23.81 (7.68.73.82)	5.16

#### Rate: 3.81/Year (2.51-5.80)





Hajarizadeh B, et al. EASL 2019. April 10 14, 2019; Vienna, Austria. Abstract SAT 233.

#### **Recent IDU**

# Philadelphia FIGHT



- Community-based testing
  - Inpatient and Outpatient SUD treatment programs
  - Homeless shelters
  - Opioid substitution programs
  - Philadelphia Department of Prisons

#### Testing Protocol

- Supported integration of confirmatory testing into SUD treatment programs via policy work
- Point of care testing:
- Rapid HCV antibody test; if reactive, then immediate blood draw for RNA by tester

#### Clinic-based testing

- Jonathan Lax Treatment Center
- Youth Health Empowerment Project
- John Bell Health Center
- Philadelphia FIGHT Pediatrics



### Linkage-to-Care Tactics Philadelphia FIGHT

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- Patient-navigation model
  - Detailed contact information obtained
  - Cross-disciplinary and multicenter weekly "HCV Huddles"
  - Open scheduling and walk-in hours
  - Mobile FibroScan<sup>®</sup>
  - FQHC: no insurance or referral required
  - Free transportation
  - Food, blankets, shoes
  - Modified DOT model, nurse led but patient driven
  - Blood draws off site

- Necessity is the mother of invention
  - Telehealth in COVID-19 pandemic



# The impact of provider education and EMR modifications on HCV testing rates





\*provider education began in September 2016 and the EMR prompts went live in December 2016

### **"C a Difference"** *Clinic- vs Community-Based Outcomes*



#### • Clinic-based (JBHC)

- HCV-Ab prevalence ~30%; ~74% chronically infected
- Patients tested between September 2016 and March 2020; linkage and treatment efforts are ongoing
- 48 RNA+ patients either refused care, are in care elsewhere, moved away, are incarcerated, or are deceased



HCV Care Cascade for Patients Tested via Primary Care Practice at JBHC
 HCV Care Cascade for Patients Tested via Community-Based Clinics

 <sup>73</sup>
 <sup>66</sup>
 <sup>51</sup>
 <sup>21</sup>
 <sup>36</sup>
 <sup>36</sup>
 <sup>13</sup>

 Prescribed Meds Started Meds Completed Meds SVR 12

- Community-based clinics
  - HCV-Ab prevalence ranges from 6% to 46%, depending on site population; ~75% chronically infected
  - Patients were tested between September 2016 and March 2020; linkage and treatment efforts are ongoing
  - 69 RNA+ patients either refused care, are in care elsewhere, moved away, are incarcerated, or are deceased
  - Care cascade is fluid and continues to evolve

# Conclusion



- System, site and provider based barriers have negatively impacted efforts at HCV diagnosis and treatment
- In FQHCs, EHR modifications, provider education, and workflow modification with attention to patient adherence support results in improved outcomes
- Monitoring the HCV care continuum in each unique setting with ongoing QI is necessary for HCV elimination in the populations of interest
- "de-siloing" of physical and behavioral health care must occur in order to facilitate incorporation of HCV services

# Health Care Silos







## Integrated Health Care



Image courtesy of : http://www.gruenehomesteadinn.com/silo2009.htm



### Philadelphia's Response to an HIV Outbreak Among People Who Inject Drugs (PWID)

Coleman Terrell\*, Champagnae Smith, MPH, Melissa Miller, MPH, Tanner Nassau, MPH, Dana Higgins, MPH, Kathleen A. Brady, MD, S. Caitlin Conyngham, Mary Evelyn Torres, MBA

\*Director, Philadelphia Department of Public Health, AIDS Activities Coordinating Office

# My perspective – focus on structures and systems



Director of Philadelphia Department of Public Health, AIDS Activities Coordinating Office (PDPH/AACO) with responsibilities for:

- HIV Surveillance Directly funded by CDC for HIV Surveillance, and National HIV Behavioral Surveillance (NHBS)
- HIV Prevention Directly funded by CDC for HIV Prevention and EHE planning; State and local funds
- HIV Care and Treatment Recipient of RW part A (nine county, two state EMA)
- Administration of PA Part B/Rebate funds in SEPA; local Philadelphia funds;
- Recent SPNS project (Jurisdictional Approach to Curing Hepatitis C among HIV/HCV Coinfected People of Color)
- Collaboration with other PDPH divisions and City Departments
- Direct services for care and prevention are provided through a network of 50 nonprofit organizations ranging from small CBOs, to large hospital-based infectious disease clinics

# Where are the people we are trying to serve?



They are living

- In a syndemic of substance use, opioid overdose, HIV, HCV, Hepatitis A, STIs
- In a city with well established services and systems in place
- In certain specific geographic locations; e.g., Kensington
- With self-identified needs that may differ from our Public Health identified needs
- In social determinates of health: poverty, lack of housing
- In community context that may or may not be supportive of providing care

#### Syringe Exchange and newly diagnosed HIV among PWID - Philadelphia





#### Newly Diagnosed HIV Among PWID\* 1983-2019

Philadelphia Department of Public Health, AIDS Activities Coordinating Office

# Identifying an outbreak



Number of Newly Diagnosed Cases of HIV (regardless of AIDS status) in all PWID, by Year



\* Data as of 6/19/2020

Philadelphia Department of Public Health, AIDS Activities Coordinating Office

# Opioid crisis and overdose epidemic

VIRTUAL 2020 NATIONAL RYAN WHITE CONFERENCE ON HIV CARE & TREATMENT

Number of Unintentional Overdose Deaths by Year and Opioid Involvement, 2010-2019, Philadelphia, PA



- <u>1 in 2</u> people who inject drugs (PWID) overdosed in the last 12 months
- <u>1 in 3</u> PWID tried but were unable to obtain Medication Assisted Treatment for opioid use treatment
- Nearly <u>1 in 2</u> WWID and <u>1 in 5</u> MWID report receiving sex for drugs or money

Philadelphia Department of Public Health Medical Examiner's Office, and PDPH/AACO National HIV Behavioral Surveillance

## Outbreak transmission network



- 23% of the total outbreak transmission network (n=320) are MSM
- 12% of the total outbreak transmission network (n=320) are MSM/IDU

VIRTUAL

# Outbreak response planning – prior to outbreak identification



- Outbreak response planning began before the outbreak was identified and involved cross-department coordination
- Data analysis plan developed to identify outbreak
- Data sharing with viral hepatitis, STI programs developed
- Inter-departmental workgroup for expanding syringe access
- Survey of medical providers to identify One-Stop Shops (OSS) and meeting with providers to assess willingness to be mobilized in case of an outbreak

# Outbreak response



- Communication plan: providers, the public, the PWID community
- Mobilization of HIV testing resources
- Enhanced partner services
- Mobilization of OSS
- Significant expansion of Syringe Services Program (SSP)
- Stronger collaboration with HIV surveillance and City jail HIV planning
- Coordination with City and Public Health Department responses to Opioid crisis; consultation with other jurisdictions
- Ongoing review and evaluation of response; development of new approaches

# Communications



HIV outbreak is happening in the midst of multiple public health issues focused on the Kensington neighborhood; there are multiple and competing messages:

- Overdose reversal
- HIV outbreak prevention and treatment
- HCV testing and cure
- Social services and housing (especially clearing encampments)
- SUD treatment access
- Hepatitis A
- Flu immunization
- Community safety concerns

# **Diagnosing HIV**

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Diagnosing facilities of newly diagnosed cases (N=164)

- Community Based Testing = 11%
- City Jails = 20%
- Emergency Departments (ED) = 16%
- Outpatient/Other = 53%

- Despite increased community testing, the vast majority of new diagnoses in PWID have occurred in clinical settings and EDs
- PDPH/AACO participated in health department presentations to major Eds about awareness of need for testing for HIV, HCV, STIs
- City jails (with opt-out HIV testing) diagnosed or had contact with the person after diagnosis. Missed opportunities despite two prison linkage programs in place
- COVID resulted in a significant reduction in community-based and clinical testing

## Preventing HIV/HCV: SSP Expansion



- The large local SSP which distributed 3.3 million syringes to 14,00 unique exchangers in 2018 was not sufficient to meet emerging needs, according to local NHBS data:
  - More than 1 in 4 PWID reported using a syringe after someone else used it
  - Average # times re-using syringe: 4
  - Average # times injecting per day: 5.1
- The main brick and mortar location is well situated in Kensington but mobile sites had not been realigned in recent times and there are significant gaps
- The emerging opioid users are frequently younger and may have less familiarity with SSP
- Increased presence of fentanyl in the drug supply, increased use of stimulants, and increased substance use in the MSM communities have created a need to look at options for expanding syringe access

# SSP expansion efforts



- Readjust times and locations of SSP sites based on fatal overdose data
- Increase funds for SSP aim to double the number of syringes distributed
- Build capacity and stabilize SSP with a goal of increasing numbers of providers
- Alternative means of syringe access
  - Pharmacy
  - Clinical
  - Harm reduction vending machines
- Safe injection facilities

Challenge: political and community engagement

# Example - harm reduction vending machines



- First effort: to find a location to provide access to MSM who might not otherwise engage in SSP
- Steps to implementation
  - Identify potential site
  - Executive staff
  - Board of Directors
  - Organization donors
  - Front line staff
  - Program participants
  - Neighbors
  - Politicians

# Treat and Prevent – One Stop Shops (OSS)



- Care sites that provide comprehensive services to people who are living with and/or at risk for HIV or Hepatitis C and their partners and families all in one location
- Surveyed providers and identified 9 sites in Philadelphia.
- Engaged OSS sites prior to outbreak during response planning and after the outbreak was identified
- Developed comprehensive list for internal and external partners

## **OSS** services



- HIV treatment
- PrEP ideally starter packs
- PEP ideally starter packs
- Hepatitis C treatment
- MAT
- Naloxone distribution
- Screening, referrals or provision of support services
- Insurance navigation
- Medical case management





#### Retention in Care & Viral Suppression for Cases Linked to OSS



Provider 1 (n=23) Provider 2 (n=15) Provider 3 (n=15) Provider 4 (n=15)

# Case study – individual lost to care



- Patient was identified as being in a highly connected network
- Diagnosis in 2016 at an HIV care facility in Philadelphia
- Care: received viral load testing 7 months later at a different Philadelphia care facility
- Follow-up
  - Tested positive for syphilis at a different care facility in 2018
  - Referred to Emergency Department for treatment
  - No evidence of additional follow-up as of 1/20/2020
- Partner services no interview based on a previous out of jurisdiction address

## Case study: care silos in Kensington



- All of the one-stop shop services are needed but the identified OSS are not optimally accessible
- The range of OSS services are available in Kensington but are siloed by disease conditions, funding streams, days of availability, and multiple provider organizations
- Multiple PDPH programs are addressing the same people with different messages and services
- Our vision is to move to a person-centered, low-threshold full-service site in the area

## Local successes



- Outbreak planning had begun before the outbreak, connections and conversations were already occurring
- We're able to build on and mobilize an existing system of testing, HIV care and prevention
  - Including a well established testing in the City jails
- Developed strong HIV/HCV coordination and integration through SPNS project – increased the capacity of HIV system to treat HCV
- Were able to develop public private partnership to significantly expand resources for syringe access and organizational support of SSP
- Have incorporated the development of a new low-threshold, high-support, one-stop shop including non-HIV services into local EHE planning

# Lessons learned



- Existing capacity may be in wrong locations
- Existing capacity may be overwhelmed (fentanyl, COIVD, encampment clearance)
- Harm reduction approaches must balance many competing needs which may not be felt by people we are serving as needs
- STI partner services staff need to supplemented with an HIV field services unit for linkage and re-engagement in HIV care
- Funding systems do not support collaboration and integration of services
- Overcoming community concerns about placement of public health programs is an ongoing issue

# Acknowledgements

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- Division of Substance Use Prevention and Harm Reduction

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### Improving HIV / HCV Testing Uptake in MAT Programs

Cathy Fowles, LPN Recovery Network of Programs





#### **Recovery Network of Programs, Inc. (RNP)**

- Private, non-profit, social service agency
- Serving Greater Bridgeport, CT since 1972

#### **Our Mission**

• Restore hope, health and well-being for individuals and families in a recovery environment that embraces compassion, dignity and respect

# **Our Clients**



• MAT program clients

HIV

• HCV

• STIs

• A population at-risk for:

Presentation Focus

- Tuberculosis
- Overdose
- Mental Health co-occurring disorders
- Unstable housing / living conditions
- Unemployment / Irregular employment
- Medication adherence challenges

#### • Huge client expansion (20 years)



# Where we were



- Admissions Prior to April 2019,
  - Mandatory blood work:
    - CBC
    - RPR
    - AST / ALT
  - Opt-out HIV / HCV via rapid testing
    - antibody only
    - separate consent required
- Clients could also request HIV/HCV rapid antibody tests anytime while receiving RNP services



# Project ConnQuER HEP C



#### • What is it?

- Project ConnQuER HEP C <u>Connecticut Quantification</u> <u>Evaluation and Response:</u> <u>HIV/HCV Elimination in</u> <u>Persons of Color</u>
- Funded by HRSA SPNS (-047) to address racial disparities in access to HIV/HCV treatment for co-infected individuals



\*Project ConnQuER is supported by the Health Resources and Services Administration (HRSA) of the U.S. Department of Health and Human Services (HHS) as part of an award totaling \$2,300,000 with no percentage financed with nongovernmental sources. The contents presented above are those of the author and do not necessarily represent the official views of, nor an endorsement, by HRSA, HHS or the U.S. Government.

## Project ConnQuER Involvement



#### • Oct 2018

- RNP Administration partnered with ConnQuER HEP C
- Dec 2018
  - RNP clinical champion for ConnQuER specified (e.g. ECHOs and monthly meetings)
  - ConnQuER champions (all partners) identified testing barriers by nominal group technique (NGT)
- Jan 2019
  - ConnQuER partners issued recommendations for improved testing at SUD/SSPs
- March 2019
  - RNP administration released updated procedures / protocols to improve HIV/HCV diagnosis in clients based on project recommendations
- April 2019
  - Clinical champion included bundled HIV/HCV testing as part of routine admission bloodwork. Clients can still opt-out, but few do. Testing uptake increased immensely.

#### The recommendations



- Findings of NGT session with Dr. Rick Altice, Dec 2018:
  - Participants voted ("P"s below) on the biggest contributors to A & B.

/	A. What gets in the way of doing		B. What would need to change in your
	routine HCV screening?		organizational setting to implement
			routing HCV screening?
1.	Clinical memory	1.	Hire more staff PP
2.	Voluntary testing vs routine P	2.	Confidential space PP
3.	Education for staff P	3.	Change policy for bundling PPP
4.	Education for patients (prioritization)	4.	Education to change clinical culture (cross
	РРР		training) PPP
5.	Patient refusal P	5.	Quality improvement to monitor PP
6.	Insufficient staffing PP	6.	Comprehensive HCV screening/referral
7.	Intake process P		protocol PPPPPP
8.	Lack of bundling testing PPPPP		
9.	Timing (length of results)		
10.	Language barrier PP		
11.	Cost concerns P		

#### The recommendations





- Findings of NGT session with Dr. Rick Altice, Dec 2018:
  - Participants voted ("P"s below) on the biggest contributors to A & B.

A. What gets in the way of doing routine HCV screening?B. What would need to change in your organizational setting to implement routing HCV screening?1. Clinical memory 2. Voluntary testing vs routine P 3. Education for staff P 4. Education for patients (prioritization) PPP1. Hire more staff PP 2. Confidential space PP 3. Change policy for bundling PPP 4. Education for patients (prioritization) PPP3. Change policy for bundling PPP 4. Education to change clinical culture (cross training) PPP5. Patient refusal P 6. Insufficient staffing PP 7. Intake process P 8. Lack of bundling testing PPPPP 9. Timing (length of results) 10. Language barrier PP 11. Cost concerns P8. What would need to change in your organizational setting to implement routing HCV screening?1. Hire more staff PP 2. Confidential space PP 3. Change policy for bundling PPP 4. Education to change clinical culture (cross training) PPP 5. Quality improvement to monitor PP 6. Comprehensive HCV screening/referral protocol PPPPPP9. Timing (length of results) 10. Language barrier PP 11. Cost concerns P9. Timing (length of results) 10. Language barrier PP 11. Cost concerns P				
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<ol> <li>Education for staff P</li> <li>Education for patients (prioritization) PPP</li> <li>Patient refusal P</li> <li>Insufficient staffing PP</li> <li>Intake process P</li> <li>Lack of bundling testing PPPPP</li> <li>Timing (length of results)</li> <li>Language barrier PP</li> <li>Cost concerns P</li> <li>Change policy for bundling PPP</li> <li>Change policy for bundling PPP</li> <li>Education to change clinical culture (cross training) PPP</li> <li>Education to change clinical culture (cross training) PPP</li> <li>Quality improvement to monitor PP</li> <li>Comprehensive HCV screening/referral protocol PPPPPP</li> </ol>	2.	Voluntary testing vs routine P	2.	Confidential space PP
<ul> <li>4. Education for patients (prioritization) PPP</li> <li>5. Patient refusal P</li> <li>6. Insufficient staffing PP</li> <li>7. Intake process P</li> <li>8. Lack of bundling testing PPPPP</li> <li>9. Timing (length of results)</li> <li>10. Language barrier PP</li> <li>11. Cost concerns P</li> </ul>	3.	Education for staff P	3.	Change policy for bundling PPP
<ul> <li>PPP</li> <li>5. Patient refusal P</li> <li>6. Insufficient staffing PP</li> <li>7. Intake process P</li> <li>8. Lack of bundling testing PPPPP</li> <li>9. Timing (length of results)</li> <li>10. Language barrier PP</li> <li>11. Cost concerns P</li> <li>training) PPP</li> <li>5. Quality improvement to monitor PP</li> <li>6. Comprehensive HCV screening/referral protocol PPPPP</li> <li>6. Comprehensive HCV screening/referral protocol PPPPP</li> </ul>	4.	Education for patients (prioritization)	4.	Education to change clinical culture (cross
<ul> <li>5. Patient refusal P</li> <li>6. Insufficient staffing PP</li> <li>7. Intake process P</li> <li>8. Lack of bundling testing PPPPP</li> <li>9. Timing (length of results)</li> <li>10. Language barrier PP</li> <li>11. Cost concerns P</li> </ul>		РРР		training) PPP
<ul> <li>6. Insufficient staffing PP</li> <li>7. Intake process P</li> <li>8. Lack of bundling testing PPPPP</li> <li>9. Timing (length of results)</li> <li>10. Language barrier PP</li> <li>11. Cost concerns P</li> </ul>	5.	Patient refusal P	5.	Quality improvement to monitor PP
<ul> <li>7. Intake process P</li> <li>8. Lack of bundling testing PPPPP</li> <li>9. Timing (length of results)</li> <li>10. Language barrier PP</li> <li>11. Cost concerns P</li> </ul>	6.	Insufficient staffing PP	6.	Comprehensive HCV screening/referral
<ol> <li>Lack of bundling testing PPPPP</li> <li>Timing (length of results)</li> <li>Language barrier PP</li> <li>Cost concerns P</li> </ol>	7.	Intake process P		protocol PPPPPP
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10. Language barrier PP 11. Cost concerns P	9.	Timing (length of results)		
11. Cost concerns P	10	. Language barrier PP		
	11	. Cost concerns P		

#### ConnQuER HEP C recommendation

"Improved HCV Testing Protocol for SUD/SSP Clinics":

- Test for HIV and HCV:
  - Ensure part of all intakes
  - Have automated checkbox for ordering
  - Allow bundled order set with reflex PCR testing
- Communicate test results
- Facilitate linkage for further management

#### The results: Improved Uptake



Mean values before policy changes:

- Monthly Clients = 112.2
- Mean HIV Testing = 13%
- Mean HCV Testing = 5%

Mean values after policy changes:

- Monthly clients = 77.3
- Mean HIV Testing = 92%
- Mean HCV Testing = 89%

#### HIV/HCV Testing Rates (Jan 2018 - Mar 2020)



#### The results: Improved Diagnosis



Totals before policy changes:

- Pos HIV results = 0
- Pos HCV Ab results = 0
- Pos HCV PCR results = 0
  - HIV/HCV co-infected = 0

Totals (means) after policy changes:

- Pos HIV results = 17 (1.4/month)
- Pos HCV Abs = 292 (26.3/month)
- Pos HCV PCRs = 128 (10.7/month)
  - HIV/HCV co-infected = 7



# **Revised protocol**



- Clients who test positive for HIV
  - Are given results and setup same day / next with medical provider if needed
- Clients who test positive for HCV antibody with Positive PCR
  - Are seen and given results; referrals are given for HCV treatment with a follow up appointment in 6 weeks
  - Those with no current medical provider are referred to a new one
- Clients who test positive for HCV antibody with Negative PCR
  - Are asked if they had treatment, also when and what the medication was
    - They are congratulated for staying HCV free after treatment
  - Many did not know they carry the HCV antibody and cleared it themselves.
    - We go over risks and transmission so they can remain HCV free

# **Engagement and Referral**



- Administration partnered with local clinic to have on-site satellite clinic
- Post April 2019
  - Real changes in client conversations
  - Having HCV PCR confirms active infection, making it real for clients
  - Certainty of existing HCV infection opens the door for treatment discussions
  - HCV is now included into client RNP treatment plan (in health record)
  - Included in follow-up appointments and discussions
  - Having PCR results improves connections with the outside providers



Of 927 clients admitted to the MAT program from Apr 2019-Mar 2020, 842 were tested for HIV and 812 for HCV Antibody; 292 had PCRs.

#### **HIV Engagement:**

- 17 Positive cases identified
  - All 17 Previously knew
    - 6 were new disclosures to the MAT program
  - 15 were already actively in care
  - 2 had been in care previously, but had stopped.
    - These 2 re-engaged due to this testing.

#### **HCV Engagement:**

- 128 Positive Ab w/ Pos PCR
  - 97 Previously knew
    - 16 Already on treatment
  - 31 New diagnoses
  - 52 referrals made to new providers
    - 22 were Lost to follow-up
  - 6 New treatment starts due to this testing





- Client care is improved by inclusion of standard HIV/HCV testing.
- Bundling of HIV/HCV testing with other intake bloodwork increases likelihood of uptake
- HCV testing <u>with PCR</u> has allowed for treatment and cure of previously undiagnosed clients (mono-infected and co-infected)
- Administration and Clinical champions are critical for successful implementation and adoption of revised policies by staff and clients

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