

# Viral Hepatitis Updates: Programs, Policy, and Accomplishments in New York City

Tristan D. McPherson, MD (he/him)

Medical Director, Viral Hepatitis Program  
Bureau of Hepatitis, HIV, and Sexually Transmitted Infections

*Envisioning a New York City without transmission or illness related to viral hepatitis, HIV, and sexually transmitted infections*

An aerial photograph of the New York City skyline, featuring numerous skyscrapers and the Hudson River. The image is overlaid with a dark blue, semi-transparent filter. The text is centered in the middle of the image.

The Viral Hepatitis Program's mission is to improve the lives of New Yorkers by ending transmission, illness, stigma, and inequities related to viral hepatitis.




# Viral Hepatitis Program



Prevention,  
Screening,  
and  
Vaccinations

# Viral Hepatitis Program

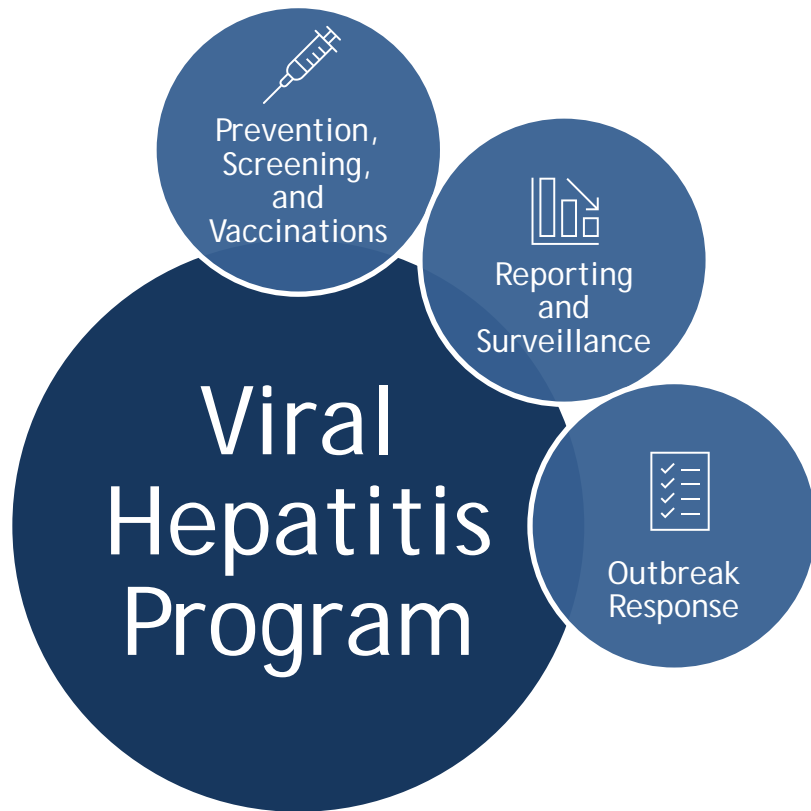


Prevention,  
Screening,  
and  
Vaccinations



Reporting  
and  
Surveillance

# Viral Hepatitis Program



# Viral Hepatitis Program



Prevention,  
Screening,  
and  
Vaccinations



Reporting  
and  
Surveillance



Outbreak  
Response



Linkage to  
Care

# Viral Hepatitis Program



Prevention,  
Screening,  
and  
Vaccinations



Reporting  
and  
Surveillance



Outbreak  
Response

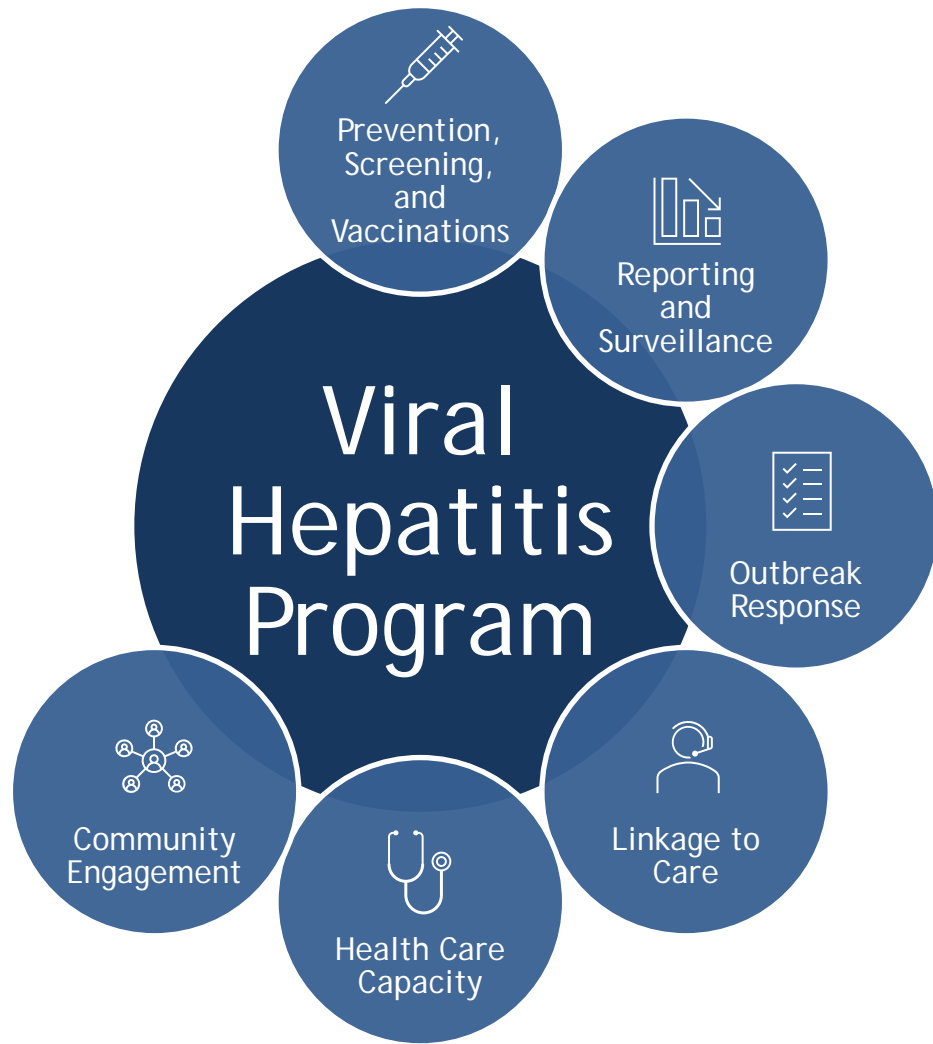


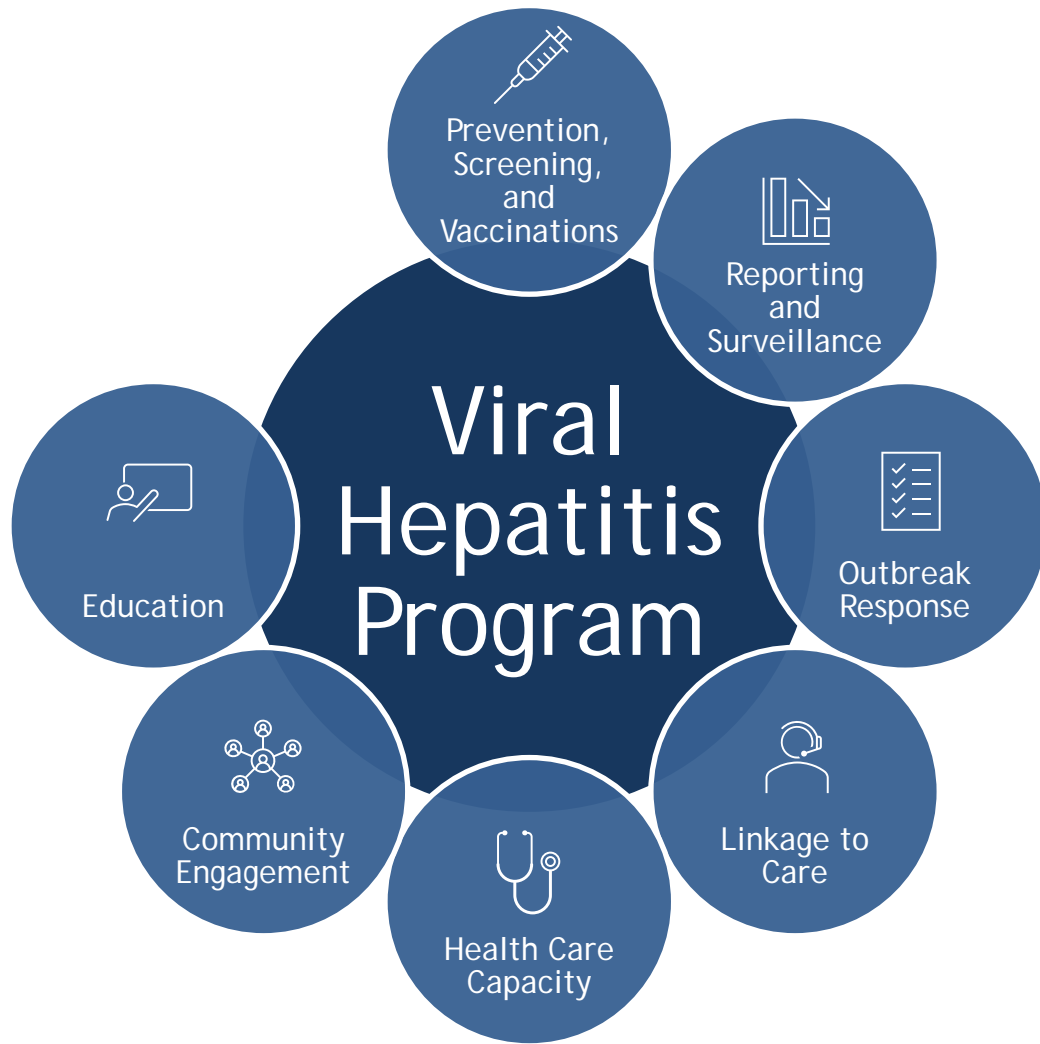
Linkage to  
Care

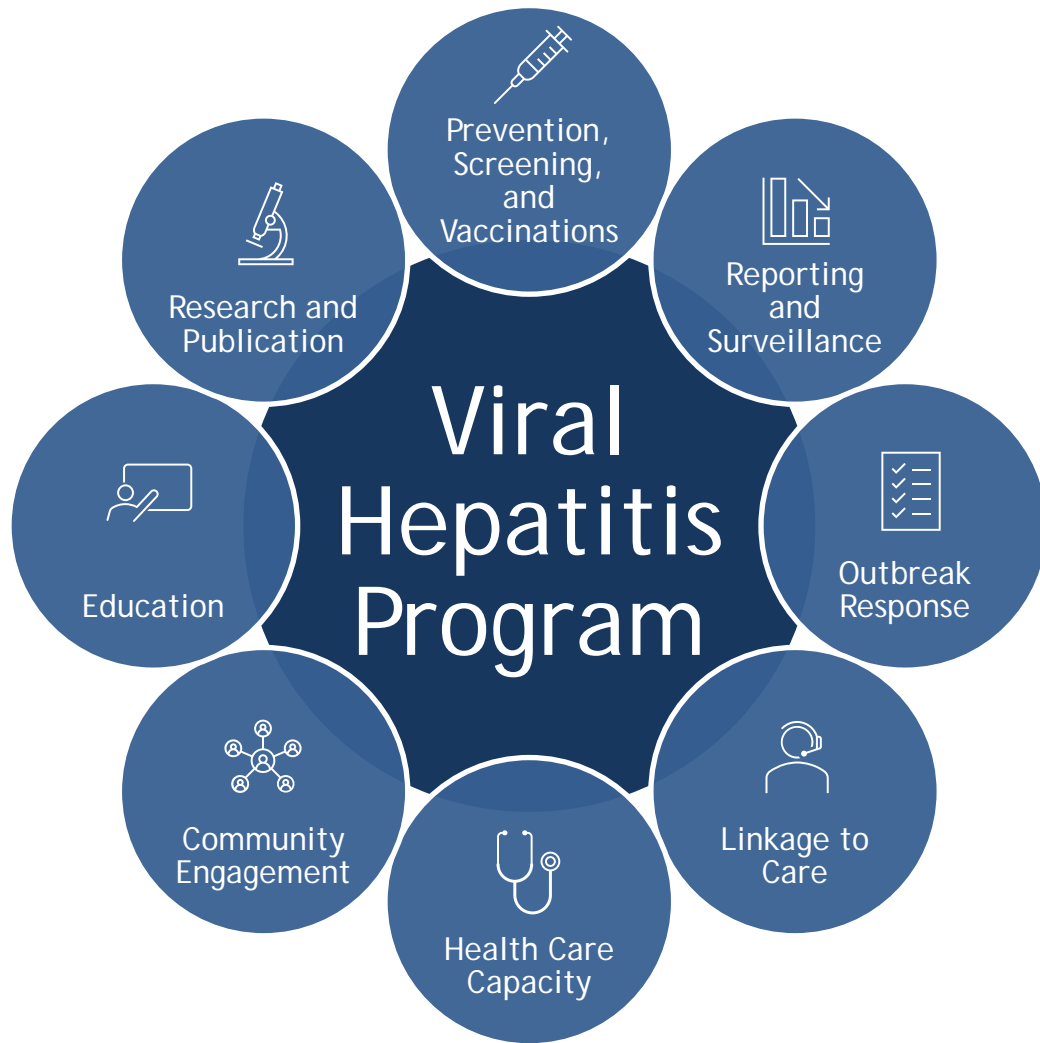


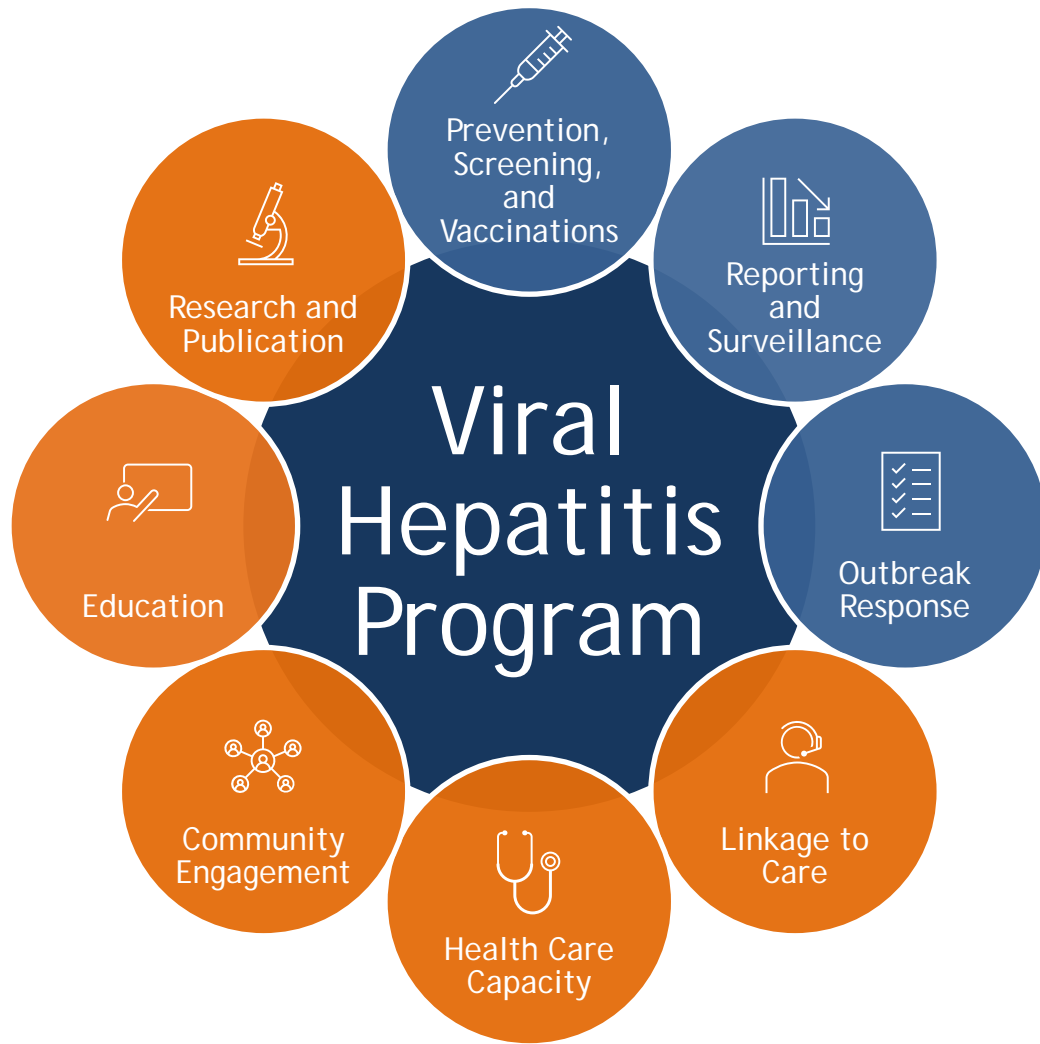
Health Care  
Capacity











# Viral Hepatitis Initiative Community Navigation Programs



# NYC Health Department Community Navigation Programs



## Check Hep C Patient Navigation Program

Screening, linkage to care, and clinical care coordination



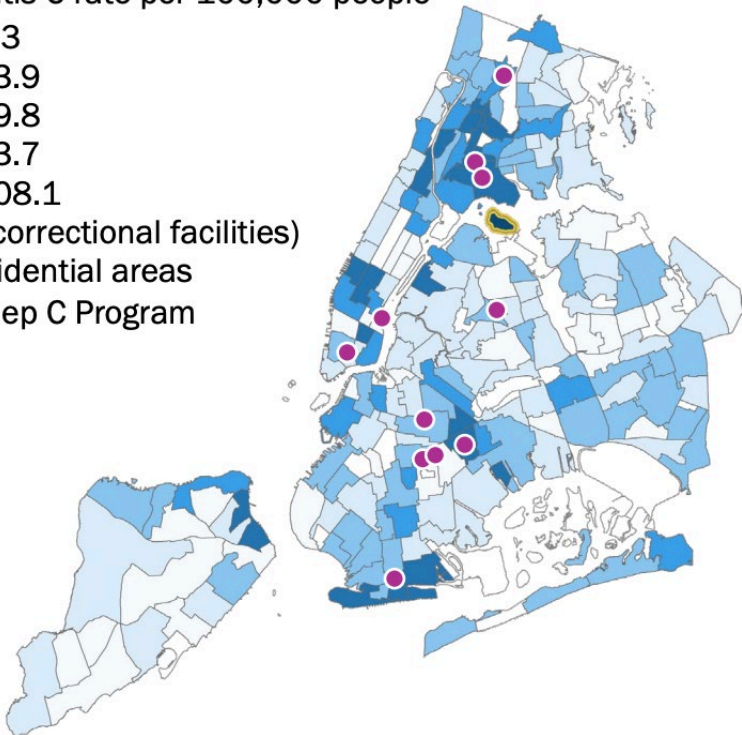
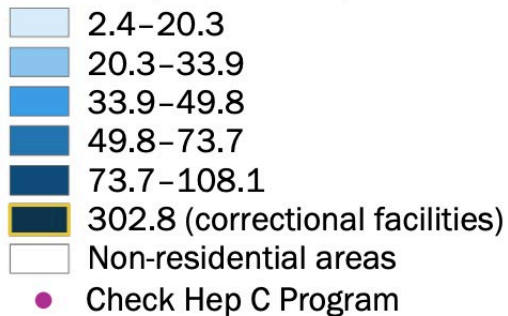
## Hep C Peer Navigation at Syringe Exchange Programs

Outreach, prevention, and navigation to testing and care

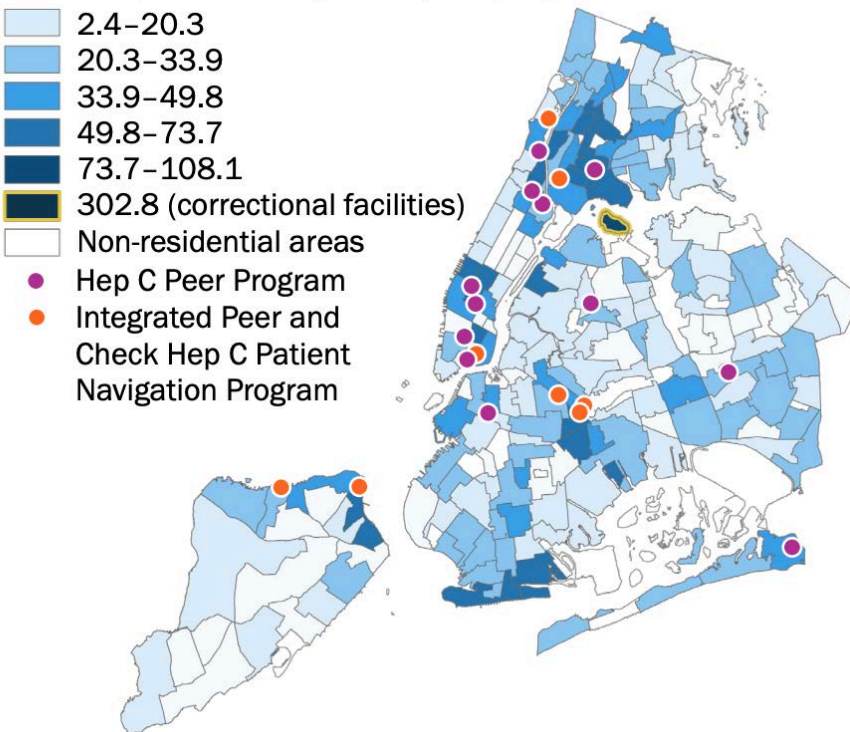
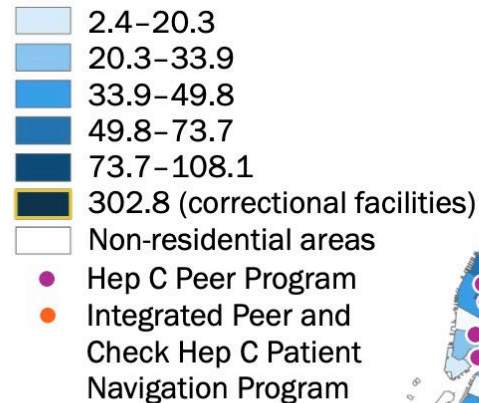
# Check Hep C/Peer Programs Located in Areas of High Prevalence of Hepatitis C, 2021



Annual hepatitis C rate per 100,000 people



Annual hepatitis C rate per 100,000 people



# Steps in Successful Navigation



## Outreach & Enrollment

## Health Promotion

## Assessment & Care Plan

## Linkage to Care

## Contact Screening, Vaccinations (if needed)

## Care Coordination Services

- Accompaniment and reminders
- Referrals to supportive services
- Alcohol counseling
- Case conference
- Treatment readiness and adherence support
- Medication and pharmacy coordination

## Discharge/transition planning

- Hep C reinfection prevention
- Liver health education and monitoring



# Program Outcomes (July 2014–June 2021)



# Program Outcomes (July 2014–June 2021)



\$44k - \$100k  
per org per year

53  
Navigators  
Trained

Service	Enrolled and Educated	Linked to Care	Treated
Number of Patients	4,858	89%	59%



\$21k - \$40k  
per org per year

117  
Peers  
Trained

Service	Enrolled and Educated	Hepatitis C-Positive Linked to Care	Treated
Number of Patients	11,516	78%	45%

# Key Client Characteristics (July 2014–June 2021)



Characteristic	Percentage
Enrolled in Medicaid	52%
Black, non-Latino/a	33%
Latino/a	31%
Mental health condition reported	22%
History of incarceration	15%
History of drug use	15%
Unstably housed	17%
HIV infection	9%

Characteristic*	Percentage
Latino/a	51%
Enrolled in Medicaid	49%
History of drug use	38%
History of incarceration	31%
Unstably housed	29%
Mental health issue reported	25%
Black, non-Latino/a	19%
HIV infection	9%

\*Based on available data from 2,547 participants who tested positive for hepatitis C



*Clinical Infectious Diseases*

INVITED ARTICLE



VIRAL HEPATITIS: Camilla S. Graham, Section Editor

## From Care to Cure: Demonstrating a Model of Clinical Patient Navigation for Hepatitis C Care and Treatment in High-Need Patients

**Mary M. Ford, Nirah Johnson, Payal Desai, Eric Rude, and Fabienne Laraque**

Bureau of Communicable Disease, New York City Department of Health and Mental Hygiene, Long Island City, New York

# Viral Hepatitis Tele-Navigation Program



# Viral Hepatitis Tele-navigation Informed by Multiple Sources



Surveillance-based  
Outreach



HIV/Hepatitis  
C Surveillance  
Match



Enhanced  
Surveillance  
Investigations



Perinatal  
Hepatitis C



Tested at  
Correctional  
Facilities



Tested at  
Urgent Care  
Facilities



Tested at  
Substance Use  
Facilities

# Viral Hepatitis Tele-navigation Informed by Multiple Sources



Surveillance-based  
Outreach



Referral-based  
Outreach



HIV/Hepatitis  
C Surveillance  
Match



Enhanced  
Surveillance  
Investigations



Perinatal  
Hepatitis C



Perinatal Hepatitis B  
Prevention Program



Public Health  
Clinics



Tested at  
Correctional  
Facilities



Tested at  
Urgent Care  
Facilities



Tested at  
Substance Use  
Facilities

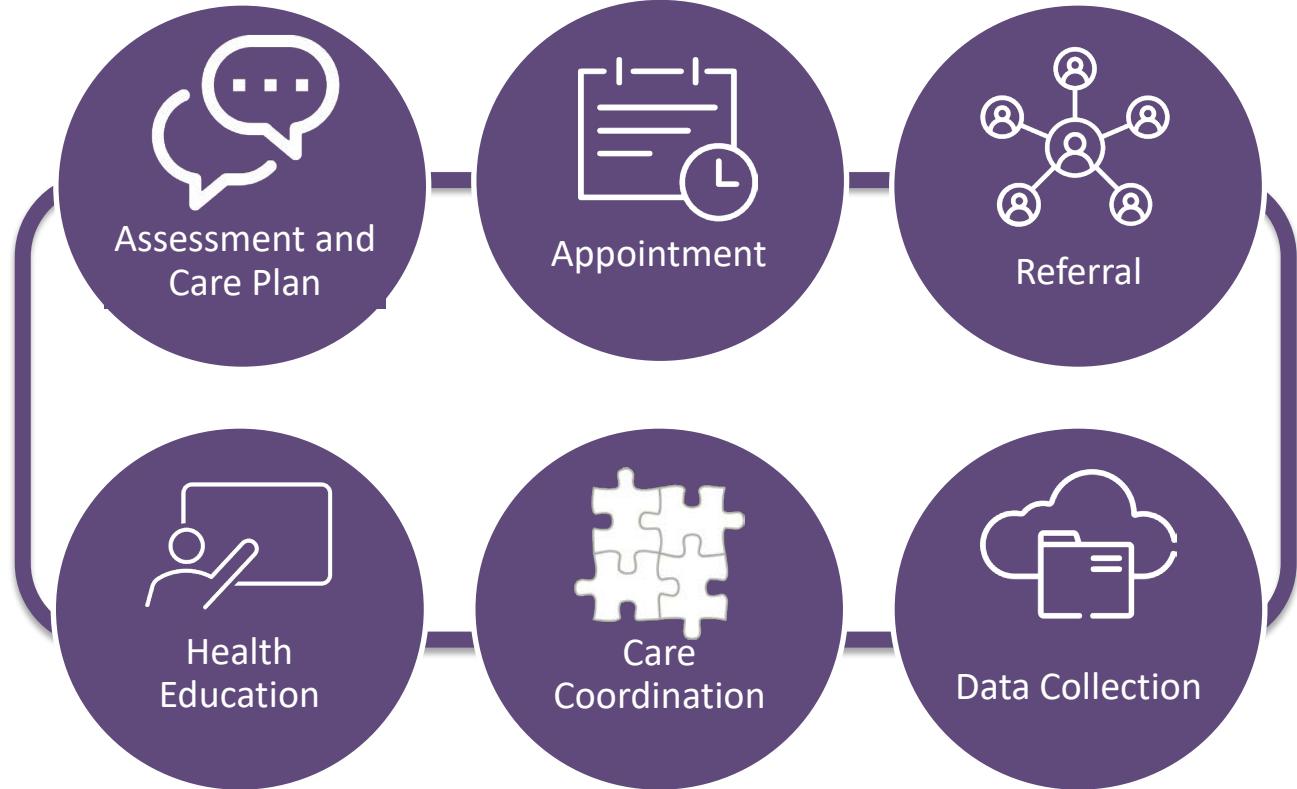


Correctional  
Health Services



Routine  
Linkage to Care

# Tele-navigation Activities





# Tele-navigation Outcomes and Patient Characteristics (February 2017–October 2022)



<b>Hepatitis C</b>	Outreached	Interviewed	Linked to Care*
Number of Patients	2941	930 (32%)	691 (23%)

\*Newly interviewed patients are still awaiting linkage to care




Journal of Immigrant and Minority Health (2021) 23:1179–1186

<https://doi.org/10.1007/s10903-021-01240-5>

ORIGINAL PAPER



## Telephone Patient Navigation Increases Follow-Up Hepatitis B Care in the Postpartum Period for Immigrants Living in New York City

Jessie Schwartz<sup>1</sup>  · Angelica Bocour<sup>1</sup> · Liz Tang<sup>1</sup> · Farma Pene<sup>1</sup> · Nirah Johnson<sup>1</sup> · Julie Lazaroff<sup>2</sup> · Miranda S. Moore<sup>1</sup> · Ann Winters<sup>1</sup>

# Health Care Provider Training and Workforce Development



# Health Care Provider Training and Workforce Development





**2,882** participants in clinical education sessions July 2020-June 2021

# Health Care Provider Training and Workforce Development



**2,882** participants in clinical education sessions July 2020-June 2021



**58** Navigators trained and employed at health centers, hospitals, and community organizations

**122** peer navigators employed at syringe services programs

# Health Care Provider Training and Workforce Development



**2,882** participants in clinical education sessions July 2020-June 2021



**58** Navigators trained and employed at health centers, hospitals, and community organizations

**122** peer navigators employed at syringe services programs

HCMMSG



Hepatitis C Mentor & Support Group

**30** community-based organizations supported peer/patient navigation training

**572** people reached since partnership in 2018

**182** care managers, health educators and staff reached through online training in 2021



## NYC Health Training

HIV Training and Technical Assistance Program





## NYC Health Training

HIV Training and Technical Assistance Program



Outreach



## NYC Health Training

HIV Training and Technical Assistance Program



Outreach



Prevention



## NYC Health Training

HIV Training and Technical Assistance Program



Outreach



Prevention



Testing and  
Linkage to Care



## NYC Health Training

HIV Training and Technical Assistance Program



Outreach



Treatment  
Support



Prevention



Testing and  
Linkage to Care



## NYC Health Training

HIV Training and Technical Assistance Program



Outreach

60 Trainings Conducted



Treatment  
Support



Prevention



Testing and  
Linkage to Care

# Viral Hepatitis Clinical Practice Facilitation Program

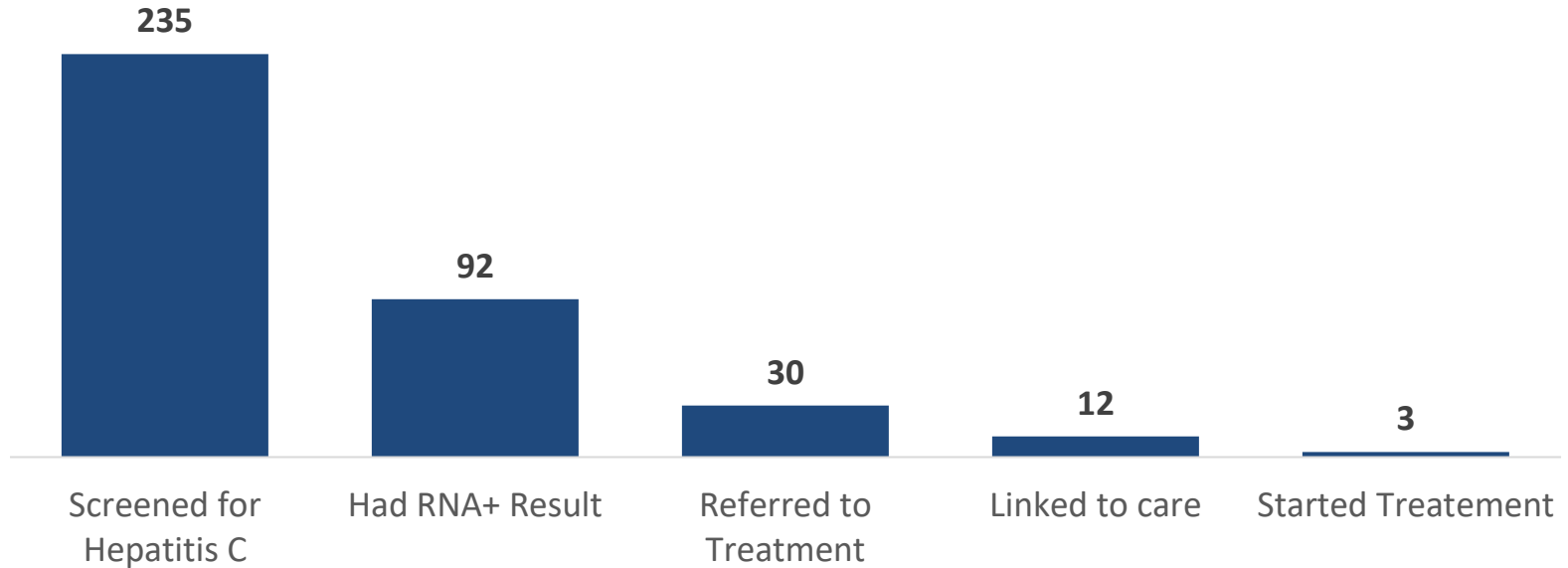




# 2021 Outcomes: Pilot Projects for Rehabilitation Centers and Opioid Treatment Programs



ACI Inpatient/Outpatient Hepatitis C Testing, Referral, Linkage and Treatment, October 2020–April 2021



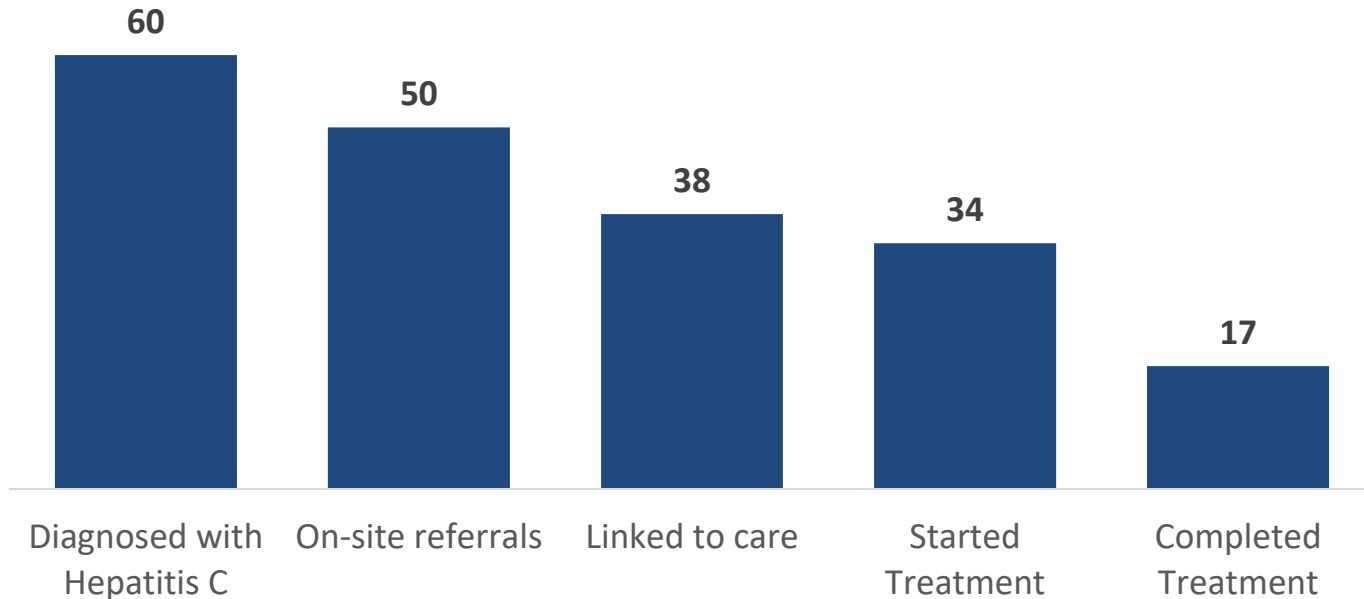
Linkage to care occurred via telemedicine



# 2021 Outcomes: Pilot Projects for Rehabilitation Centers and Opioid Treatment Programs



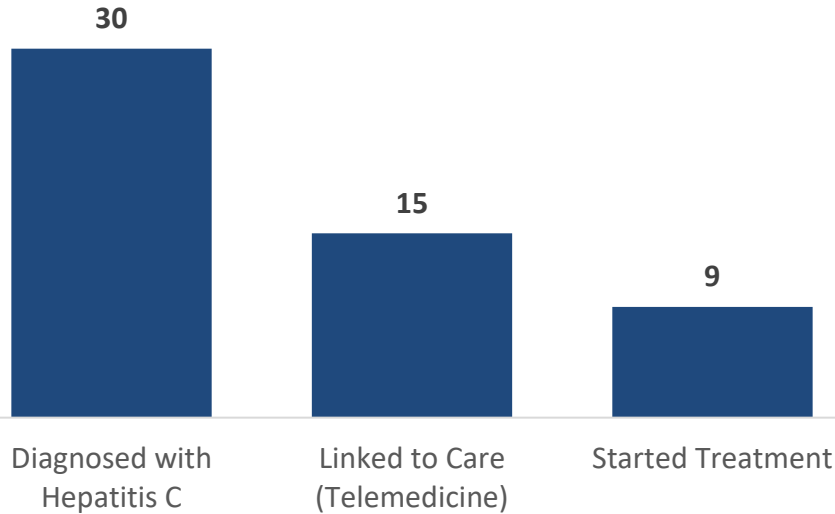
START Hepatitis C Patient Referrals, Linkage to Care and Treatment, July 2020–April 2021



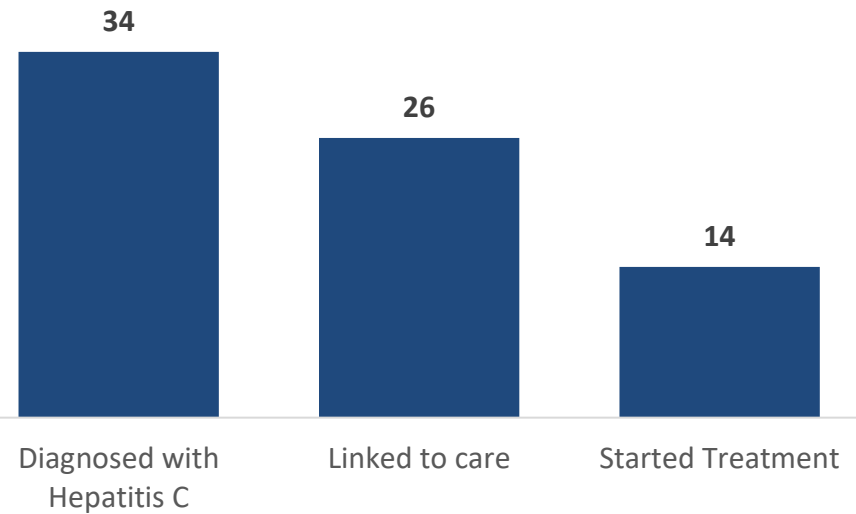
# 2021 Outcomes: Hep C Treatment Via Telemedicine At 2 Syringe Services Programs



Alliance for Positive Change: Hepatitis C Diagnoses,  
Linkage to Care, and Treatment Initiations,  
September 2020–April 2021



New York Harm Reduction Educators: Hepatitis C  
Diagnoses, Linkage to Care, and Treatment  
Initiations, September 2020–April 2021





**HEP FREE NYC**

**STAND UP AND HELP END HEP**

## Viral Hepatitis Team

- Adeeba Khan
- Ajya Sah
- Alexis Brenes
- Alma Chaves
- Bryant Tufino Flores
- Christina Hwang
- Cynthia Ortigoza
- Diana Diaz Muñoz
- Farma Pene
- Gloria Glenn
- Holly Anger
- Jackilyn Rivera
- Kavita Misra
- Kelly Huang
- Kevin Madera
- Leandra Ureña
- Liz Tang
- Marie Bresnahan
- Nadine Kela-Murphy
- Rahel Yosief
- Sarah Ahmed
- Shamar Smalls
- Tristan McPherson
- Umaima Khatun
- Versalle Shelton



**Through our partnerships and work, viral hepatitis elimination by 2030 is possible!**

*“Envisioning a New York City without transmission or illness related to viral hepatitis”*

# References

- New York City Department of Health and Mental Hygiene. Hepatitis A, B and C in New York City: 2020 Annual Report. Long Island City, NY. 2021. <https://www1.nyc.gov/assets/doh/downloads/pdf/cd/hepatitis-abc-annual-report-2020.pdf>
- Moore MS, Bocour A, Laraque F, Winters A. A surveillance-based hepatitis C care cascade, New York City, 2017. *Public Health Rep.* 2018;133(4):497-501.
- Schwartz J, Bocour A, Tang L, Pene F, Johnson N, Lazaroff J, Moore MS, Winters A. Telephone Patient Navigation Increases Follow-Up Hepatitis B Care in the Postpartum Period for Immigrants Living in New York City. *J Immigr Minor Health.* 2021 Dec;23(6):1179-1186.
- Ford MM, Johnson N, Desai P, Rude E, Laraque F. From care to cure: Demonstrating a model of clinical patient navigation for hepatitis C care and treatment in high-need patients. *Clinical infectious diseases : an official publication of the Infectious Diseases Society of America.* 2017;64(5):685-691.
- Weng MK, Doshani M, Khan MA, et al. Universal Hepatitis B Vaccination in Adults Aged 19–59 Years: Updated Recommendations of the Advisory Committee on Immunization Practices — United States, 2022. *MMWR Morb Mortal Wkly Rep* 2022;71:477-483.
- Kela-Murphy N, Moore MS, Verma CM, Bresnahan MP, Harrison E, Schwartz J, Winters A. The Hepatitis C Clinical Exchange Network: A Local Health Department Partnership With Acute Care Hospitals to Promote Screening and Treatment of Hepatitis C Virus Infection. *J Public Health Manag Pract.* 2022 Mar-Apr 01;28(2):E413-E420.
- AASLD-IDSA. HCV testing and linkage to care. Recommendations for testing, managing, and treating hepatitis C. <http://www.hcvguidelines.org/full-report/hcv-testing-and-linkage-care>. Accessed 9 May 2022.
- New York City Department of Health and Mental Hygiene. Plan to Eliminate Viral Hepatitis as a Major Public Health Threat in New York City by 2030. Long Island City, NY. 2021. <https://www1.nyc.gov/assets/doh/downloads/pdf/cd/viral-hepatitis-elimination-plan.pdf>
- Images courtesy of: Pablo Fernandez Vallejo, Ida Desi Mariana, Hans Draiman, IconMark, Adrien Coquet, N.Style, Rakhmat Setiawan, Nikita Kozin, Agus Rijwan Jaelani, Berkah Icon, DPIcons, Loritas Medina, Rashida Luqman Kheriwala, Untashable of the Noun Project and AP Photo/Eric Risberg, File

# List of Funded Organizations



## Community Organizations:

1. African Services Committee
2. After Hours Project
3. AIDS Center of Queens County
4. The Alliance LESHRC
5. Boom! Health
6. Community Health Action of Staten Island
7. Family Services Network of NY
8. Housing Works
9. Korean Community Services
10. New York Harm Reduction Educators
11. Positive Health Project
12. Praxis Housing Initiatives
13. Safe Horizon Streetwork Project
14. St. Ann's Corner of Harm Reduction
15. VOCAL-NY
16. Washington Heights CORNER Project

## Health Centers and Hospitals:

1. Bedford Stuyvesant Family Health Center
2. Boom! Health
3. BronxCare Health System
4. Brownsville Multiservice Family Health Center
5. *Care for the Homeless (retired)*
6. Charles B Wang Community Health Center
7. Community Healthcare Network
8. H+H Bellevue Hospital
9. H+H Coney Island Hospital
10. H+H Elmhurst Hospital
11. H+H Kings County Hospital
12. *Harlem United (retired)*
13. Kingsbrook Jewish Medical Center
14. Montefiore Comprehensive Health Care Center
15. Seventh Avenue Family Health Center at NYU Langone
16. *Wyckoff Heights Medical Center (retired)*



# The Hepatitis C Clinical Exchange Network: A Local Health Department Partnership With Acute Care Hospitals to Promote Screening and Treatment of Hepatitis C Virus Infection


Nadine Kela-Murphy, MPH; Miranda S. Moore, MPH; Charu M. Verma, MPH; Marie P. Bresnahan, MPH; Emily Harrison, MD; Jessie Schwartz, MPH; Ann Winters, MD



# HCV Testing and Linkage to Care

## One-Time Hepatitis C Testing

### Recommendations for One-Time Hepatitis C Testing

RECOMMENDED	RATING 
One-time, routine, opt out HCV testing is recommended for all individuals aged 18 years or older.	I, B
One-time HCV testing should be performed for all persons less than 18 years old with activities, exposures, or conditions or circumstances associated with an increased risk of HCV infection (see below).	I, B
Prenatal HCV testing as part of routine prenatal care is recommended with each pregnancy.	I, B
Periodic repeat HCV testing should be offered to all persons with activities, exposures, or conditions or circumstances associated with an increased risk of HCV exposure (see below).	IIa, C
Annual HCV testing is recommended for <a href="#">all persons who inject drugs</a> , for <a href="#">HIV-infected men who have unprotected sex with men</a> , and <a href="#">men who have sex with men taking pre-exposure prophylaxis (PrEP)</a> .	IIa, C