A Health Department Data-to-Care Approach to Improving Hepatitis C Screening and Treatment Rates in Health Care Organizations in New York City

Nirah Johnson LCSW, Program Director
Nadine Kela-Murphy MPH, Program Manager

NYC Health Department | Viral Hepatitis Program

Hep@health.nyc.gov

CONFLICT OF INTEREST DISCLOSURE

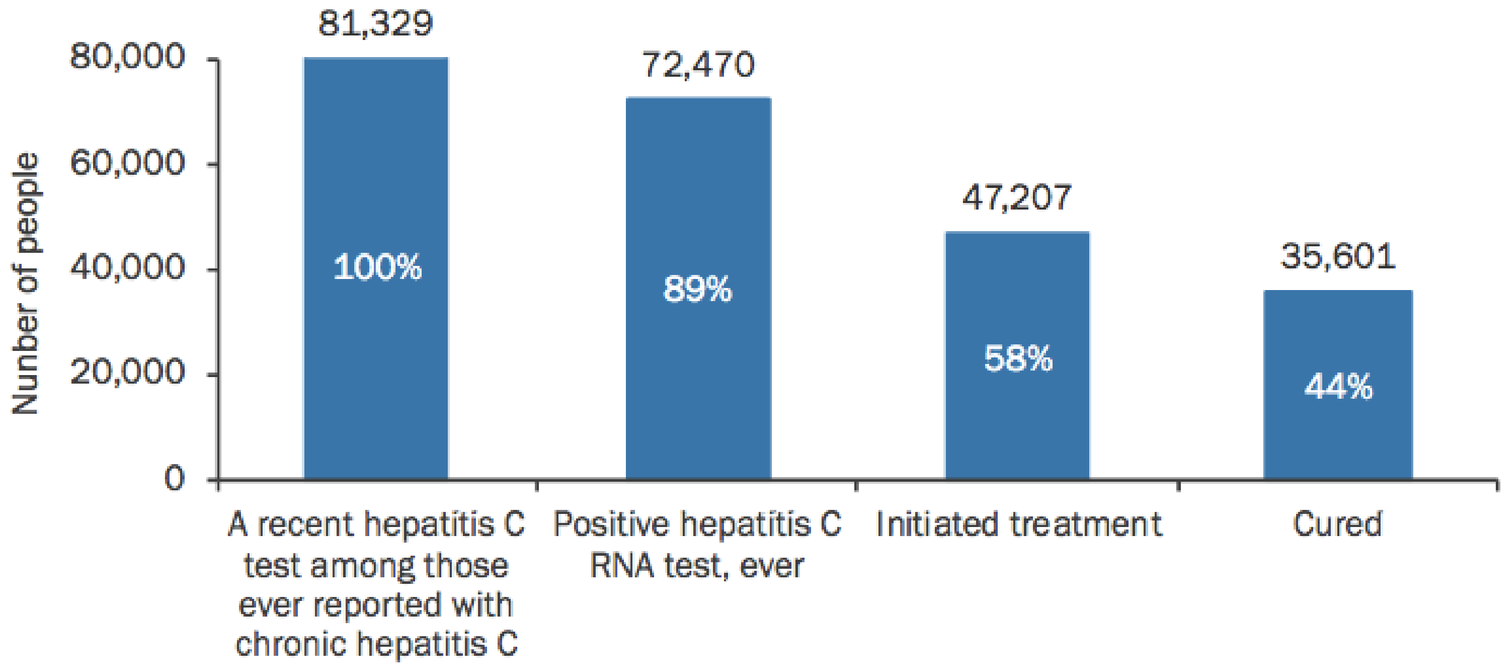
The NYC Health Department Viral Hepatitis Program Data to Care Model was developed through funding from Gilead and HRSA.

BACKGROUND

CHRONIC HEPATITIS C CARE CASCADE

The Health Department estimates that 116,000 people (1.4% of NYC residents) are living with chronic hepatitis C.[18] In 2016, the Health Department developed a validated algorithm to determine the number of people treated for and cured of chronic hepatitis C using surveillance data.[19]

FIGURE 21. Care cascade for people in New York City with chronic hepatitis C recently reported (from July 1, 2014, to June 30, 2018) with a positive hepatitis C test, regardless of year of first report



Almost all people can be treated and cured of hepatitis C in less than 12 weeks with few side effects, including people who use drugs and people living with HIV.

Source: Hepatitis A, B and C in New York City, 2018 Annual Report

DATA TO CARE MODEL

Analysis of Mono and Co-Infected Population
through matching of surveillance data

Provider Education & Training

Clinical Practice Facilitation

Telephone Outreach & Linkage to Care

OBJECTIVES

- Use surveillance data to identify health care facilities with a high burden of hepatitis C (HCV) and form partnerships
- Develop and disseminate surveillance–based facility specific dashboards with HCV screening and treatment metrics to support HCV quality improvement initiatives
- Provide training, technical assistance, tools and prompts to encourage providers to review facility electronic health record data at least annually to assess and improve HCV screening and treatment rates

DATA-TO-CARE TOOLKIT

Multiple resources to use in various combinations based on need

- Provider Guidance, Education and Training
- Facility specific surveillance-based dashboards and patient lists
- Electronic Health Record data review tool
- Technical assistance for quality improvement project implementation

Provider Education and Training

Main goals to clinical provider trainings

- Increase providers knowledge and skills in HCV screening, diagnostic testing, care, and treatment recommendations and best practices
- Increase provider HCV care and treatment capacity NYC wide
- Improve provider capacity to provide quality respectful care for people who use drugs

Provider Guidance Tools

NYC Health

NEW YORK CITY DEPARTMENT OF HEALTH AND MENTAL HYGIENE

Oxiris Barbot, MD
Commissioner

January 2019

Dear Colleague:

People living with HIV and hepatitis C infection are at high risk for developing serious liver disease and liver cancer. Fortunately, antiviral medications can cure hepatitis C infection in the majority of patients living with HIV in 8 to 12 weeks with few side effects. Among 59,783 HIV-positive persons residing and receiving care in NYC in 2017, 12% had ever had an RNA-positive result reported for hepatitis C; of those, only 68% had initiated hepatitis C treatment.

The medical community has an unprecedented opportunity to prevent cirrhosis, end-stage liver disease, liver cancer, and death from hepatitis C infection through early identification and treatment.

To improve health outcomes of persons with HIV, the NYC Health Department recommends that providers:

1. **Test all HIV-positive individuals for hepatitis C at intake into care.** If there is no record of previous hepatitis C testing, test with antibody and reflex to RNA. If there is a history of hepatitis C infection, test for the presence of hepatitis C RNA.

2. **Retest HIV-positive individuals with ongoing risk for hepatitis C annually.** Individuals at risk include people who use drugs and men who have sex with men.

3. **Treat all co-infected patients for hepatitis C.** With support, almost all people can successfully complete hepatitis C treatment, including those who are actively using drugs or alcohol and those with untreated HIV.

There are many programs that specialize in treatment for people who use drugs and provide intensive supportive services such as directly observed therapy (DOT) throughout NYC. Contact Hep@health.nyc.gov or call our Hepatitis Navigation Warm-line **(917) 890-0834** for assistance helping your patients get treated and cured.

The Health Department encourages all infectious disease and primary care providers to learn how to treat hepatitis C infection. Review the resources below for information about free trainings available for clinical and allied health providers.

Sincerely,

Demetre Daskalakis, MD, MPH
Deputy Commissioner, Division of Disease Control

City Health Information

New York City Department of Health and Mental Hygiene

July 2020

Dear Colleague:

July 28th is World Hepatitis Day and is an opportunity to remind providers of the impact you can have on the lives of your patients by providing prevention and treatment for hepatitis B and C. An estimated 230,000 New Yorkers are living with chronic hepatitis B, and 116,000 are living with chronic hepatitis C; *many remain undiagnosed and at risk for cirrhosis and liver cancer.*

In March 2020, the United States Preventive Services Task Force recommended one-time screening for hepatitis C in people aged 18-79. This important expansion in screening will increase the number of people who are aware of their status and get treated and cured.

Simplified treatment guidance has been developed for hepatitis B and C, enabling most people to be treated in a primary care setting. All people can be treated, regardless of their alcohol and drug use.

To improve health outcomes of New Yorkers at risk for hepatitis B or C, providers should:

- **Test all persons at risk for hepatitis B** at intake into care, including people who were born in countries with high prevalence of hepatitis B, family members and close contacts of people living with hepatitis B, and people who use drugs. **Vaccinate** people who are not immune.
- **Test all people aged 18-79 for hepatitis C** at intake into care, including people who are pregnant. **Re-test** people with ongoing risk factors (i.e. current drug use) at least annually.
- **Treat people with chronic hepatitis B** with antivirals according to professional guidelines. See the simplified treatment guidance here.
- **Cure all people with chronic hepatitis C** with direct acting antiviral therapy, including people who use drugs and alcohol. See simplified treatment guidance here.

Sincerely,

Demetre Daskalakis, MD, MPH
Deputy Commissioner, Division of Disease Control

Resources

- American Association for the Study of Liver Diseases, Hepatitis B and C Practice Guidelines. www.aasld.org/publications/practice-guidelines
- Simplified Hepatitis Treatment for Treatment-Naive Patients Without Cirrhosis. www.hcvguidelines.org/treatment-naive/simplified-treatment

Recommendations for Hepatitis C Screening and Treatment in People Who Use Drugs in New York City

HEP FREE NYC

Test people who use drugs (PWUD) for Hep C at least annually

Test Type	Test result	
	If positive (+)	If negative (-)
Antibody Test: Use to test people who have **never** tested Hep C positive.	Confirm with RNA Test (Reflex RNA testing is ideal)	Retest in 12 months with antibody test
RNA Test: Use to test people who have **ever** tested Hep C positive.	Link to Hep C medical care	Retest in 12 months with RNA test

All PWUD with Hep C should be evaluated for treatment

- Hep C is treated with oral medications in 8–12 weeks with few side effects. See the algorithm for the management and cure of Hep C infection at www.bit.ly/simplified-hepc.
- Over 90% of PWUD with Hep C who are treated achieve a cure, less than 5% get reinfected.
- Curing Hep C prevents ongoing transmission to drug-sharing and sexual partners.
- Patient-centered care practices including Hep C patient navigation can help PWUD get care and complete treatment. To find a program in NYC, visit: www.nyc.gov/health/hepc

Health Insurance approves Hep C medications for PWUD

- In NYS, there are no Hep C medication restrictions based on sobriety, stage of liver disease or prescriber experience. People actively using drugs or alcohol can be treated.
- Specialty pharmacies can support the medication prior authorization process.
- If health insurance denies medication coverage due to drug use, contact the New York State Office of Health Insurance Programs omcmail@health.state.ny.us

Prevent Hep C and Overdose

- Link people to harm reduction and syringe service programs jduha.org/nyc-sep-map
- Link people to medication-assisted treatment, such as buprenorphine nyc.gov/nycwell
- Provide Naloxone nyc.gov/naloxone and prevention tips www.bit.ly/opioid-overdose-basics

Resources

- To find Hep C patient navigation programs and programs for uninsured in NYC, visit: nyc.gov/health/hepc
- Clinical Education Initiative (CEI) Hepatitis C and Drug User Health Center of Excellence: www.ceitraining.org
- American Association for the Study of Liver Disease - Identification and Management of Hepatitis C in People Who Inject Drugs: hcvguidelines.org/unique-populations/pwid
- For more information email: hep@health.nyc.gov

Clinical Training

Developed and delivered by the Empire Liver Foundation

- HCV Grand Rounds (1 CME)
- Clinical Management of HCV, including in PLWH (4CME)
- HCV Treatment in People Who Use Drugs (1 CME)
- HCV Medication Coverage and Prior Authorization (1 CME)
- Half-day live preceptorship with Hepatology (4 CME)

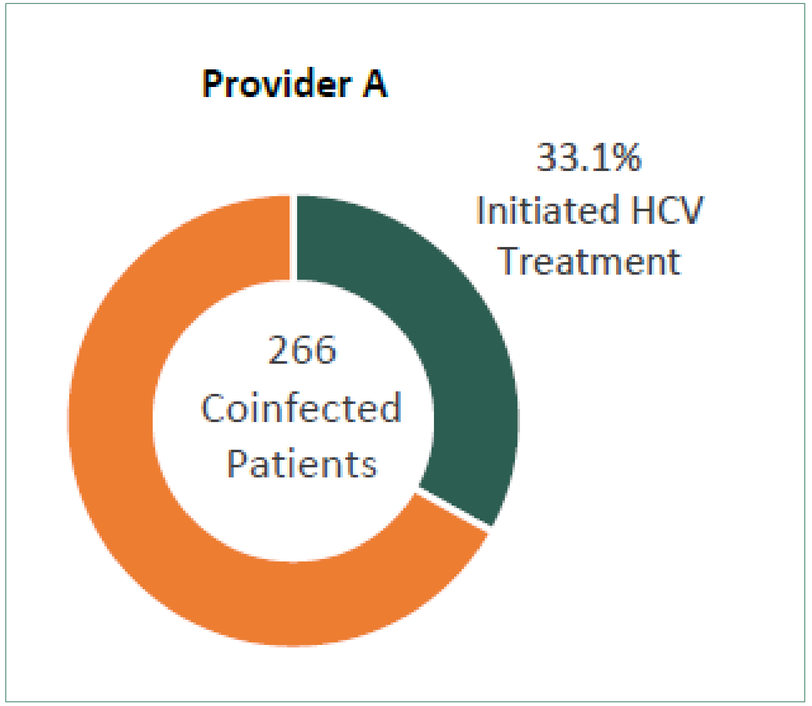
Surveillance-Based Dashboards

Surveillance registries for HCV and HIV

- Electronic laboratory reporting of HIV and HCV tests for all New York City residents
- Reports include the name and address of the ordering facility
- Facility-specific dashboards were developed and emailed to providers and leadership at health care facilities
- Surveillance based patient lists offered for review and case management

Dashboards

HIV/HCV Dashboards



NYC Health

Hepatitis C Testing and Treatment Dashboard

Hospital XYZ

2016-2018 New York City Health Department Surveillance Data

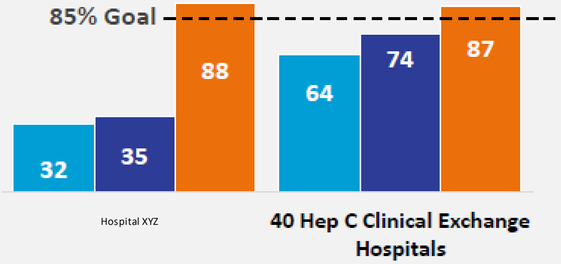
Hepatitis C Antibody Testing

Number of people who tested hepatitis C antibody positive at Hospital XYZ System, 2016-2018

Hepatitis C RNA Confirmatory Testing

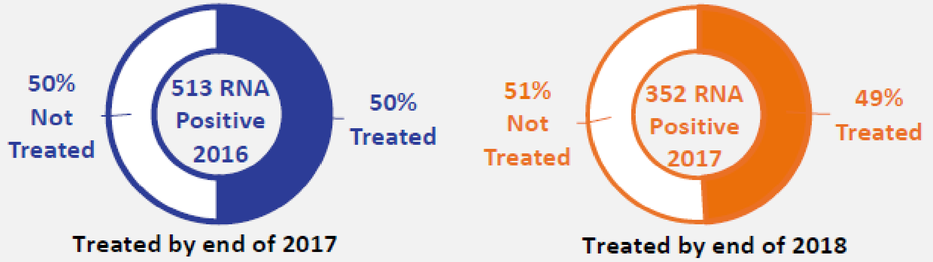
Percentage of people who tested hepatitis C antibody positive who received a confirmatory RNA test within three months, 2016-2018

The New York City Health Department's goal is 85% hepatitis C RNA confirmation compliance. This can be accomplished by implementing hepatitis C antibody to RNA reflex testing.



Hepatitis C Treatment Initiation

Number of people who tested hepatitis C RNA positive at Hospital XYZ in 2016 and 2017, and percentage who initiated treatment by the end of 2017 and 2018.



Data source: New York City Health Department Surveillance.
To read the "Hepatitis A, B and C in New York City: 2017 Annual Report," visit nyc.gov/health and search for **hepatitis**. For more information about the dashboard, email **hep@health.nyc.gov**.

Clinical Practice Facilitation Projects

Formal agreements with high burden facilities

- Provide mini-grants to health care facilities for 1 -2 year projects
- Project Teams include Health Department project management staff, subject matter experts, health care facility clinical and IT and or Quality Improvement staff
- Collaborate on development, implementation, monitoring and evaluation of quality improvement projects

Electronic Health Record Data Review Tool

Support assessment of screening and treatment rate at the facility

Recommended to conduct at least annually

Row	Measure	Interpretation	Number
1	Total adult patients with a visit [Ia] in the specified review period in your Health Center + a diagnosis of HIV [Ib]	*At-risk visits*	
2	From Row #1, number with documentation of a HCV antibody test order/result [Ia] or HCV RNA test order/result ever (prior to the end of the review period) [IIb]	-	
Proportion of HIV patients seen at health center ever tested for HCV		*row 2 ÷ row 1*	
3	Of Row #2, number with a positive HCV RNA test result or diagnosis of HCV in problem list/ICD 9/10 codes [III]	-	
4	Of Row #3, number whose most recent HCV RNA test result was positive [IV]	-	
5	Number of patients from Row #3 for whom HCV medication was prescribed/initiated treatment [V]	-	
Proportion of patients with HCV who initiated treatment		*row 5 ÷ row 3*	

[Ia] CPT codes for patient encounter during the reporting period: CPT codes 99201, 99202, 99203, 99204, 99205, 99212, 99213, 99214, 99215 or HCPCS codes (Medicare) G0402, G0438, G0439 (outpatient only) Inpatient CPT codes could include: 99221, 99222, 99223 (initial care), 99231, 99232, 99233 (subsequent care), or 99218, 99219, 99220 (observation initial care)

Surveillance-based Patient Lists

- Review and promote HCV treatment
- Report patient disposition back to the Health Department

This section to be completed by Health Department						This section to be completed by facility after reviewing patient record			
NYC Health Dept ID	Last name	First name	Date of birth	Sex at birth	Most recent hepatitis C RNA test result*	Review outcome**	Treatment barriers**	Resources needed**	Notes
1234	John	Doe	MM/DD/YYYY	Male	Positive	Will outreach and link to hepatitis C care/treatment	Other adherence issues, Insurance	DOT	
12345	Jane	Doe		F	positive	Lost to follow up			

*Laboratory data reported to the NYC hepatitis C surveillance registry as of [date].

**Dropdown options

Outcome	Treatment Barriers	Resources Needed
• Previously treated and cured of hepatitis C • Currently being treated for hepatitis C • Will outreach and link to hepatitis C care/treatment • Lost to follow-up • Other (Please explain in notes)	Please list all that apply: • Insurance • Mental health • Previous difficulties with hepatitis C treatment • Substance use • Other adherence issues	Please list all that apply: • DOT • Patient navigation

Communities of Practice and Learning

- Hep Free NYC – Citywide Network of professionals, advocates, and affected people working to build capacity to prevent, manage and treat Hepatitis B and C in NYC
  - NYS Hepatitis Telemedicine Workgroup – building capacity of NYS providers to deliver hepatitis care via telemedicine, with a focus on substance use treatment programs
  - Special events including symposiums, trainings, and other events based on community request

Case Study 1: Brightpoint Health

Community Health Center provider of integrated primary care, behavioural care, dental, and substance use services –70% of population served experience homelessness

Goals	• Develop EHR query report on HCV screening rate and number in need of HCV treatment • Increase staff capacity to outreach and link coinfected patients to care • Promote HCV treatment education and best practices
QI Activities	✓Created weekly EHR query report through health informatics quality management ✓Reviewed patient list weekly to identify those in need of treatment ✓Provided quarterly HCV trainings for frontline staff
Outcomes	45% of patient on the coinfected list were linked to HCV care, treated and cured
Staff Responsible	Assistant Director for Business Operations: Senior Director, Grants Programs, HCV Navigator (funded through 340B)

Case Study 2: BronxCare Health System

Multisite Family Medicine Department of a non-profit hospital

Goals	• Provide training to clinical providers via Hep C Grand Rounds • Implement reflex testing • Promote HCV treatment education and best practices • Increase screening of baby boomers and patients at risk for hepatitis C
QI Activities	✓Leverage Hepatitis C Dashboard to gain leadership buy-in for system upgrade ✓Develop monitoring report to identify patients with a positive HCV RNA test in the EMR
Outcomes	➢ Implemented reflex testing in the laboratory and EMR order set ➢ Number of patients at risk screened for hepatitis C increased from 4,466 in 2017 to 11,038 in 2018 ➢ Proportion of patients receiving an RNA confirmatory test within 3 months after a positive antibody test increased from 35% in 2017 to 88% in 2018
Staff Responsible	Medical Director of Family Medicine, HIV/HCV Program Manager

Hepatitis Clinical Exchange

Clinical Capacity Building Projects:

- Engage in projects across jurisdictions
- Sharing quality improvement tools and initiatives

Hepatitis Clinical Exchange

Hepfree.nyc/hepcx

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HEP@HEALTH.NYC.GOV

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