

Hepatitis C Universal Screening Implementation at a Hospital and Community Health Center

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Disclosures

- The FOCUS Program at STAR Health Center, Brookdale is funded by Gilead Sciences

Objectives

By the end of this presentation, participants will be able to:

- Describe the universal screening guidelines for hepatitis C (HCV)
- Understand the need for identification and linkage to care for patients with HCV
- Identify best practices and practical strategies for implementing these guidelines in a community health center and a hospital

Background and Significance

- HCV is responsible for more deaths than the next 60 reportable infections combined, including HIV
- Approximately 4.1 million individuals in the US have evidence of prior or active infection
 - 2.4 million individuals with active infection
- 2010-2017: 3.8 fold increase in new HCV infections
- Most rapid increase in infection in young people using injection drugs, 20-39yo, men > women
- HCV is now curable with direct-acting antivirals (DDAs) in 8-12 weeks

2020 Centers for Disease Control (CDC) HCV Screening Recommendations



1. Universal Screening

Screen **all adults ≥ 18 years** at least once in a lifetime
(except in settings where HCV RNA-positivity is $< 0.1\%$)



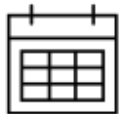
2. Pregnancy

Screen **all pregnant people during each pregnancy**
(except in settings where HCV RNA-positivity is $< 0.1\%$)



3. Exposure

One-time testing among people with recognized conditions or exposures,
regardless of age or setting prevalence
(more info on www.cdc.gov/hepatitis/hcv/guidelinesc.htm)



4. Periodic testing

Routine periodic testing for people with on-going risk factors

2020 US Preventative Services Task Force (USPSTF) HCV Screening Recommendations

- Screen all adults (including pregnant persons) aged 18 to 79 years
 - One-time screening for most adults
 - Periodically screen persons with continuous risk (such as current injection drug use)

Read the full recommendations at <https://jamanetwork.com/journals/jama/fullarticle/2762186>

Recommendations For HCV Screening In Persons Less Than 18 Years Of Age

- One-time testing should be performed for all persons less than 18 years of age with behaviors, exposures or risk factors or circumstances associated with an increased risk of HCV exposure

Re-testing for Patients at Risk for HCV

- Periodic repeat HCV testing should be offered to all persons with behaviors, exposures or risk factors associated with HCV
- Annual HCV testing is recommended for all persons who inject drugs and for HIV-infected men who have unprotected sex with men

Summary: 2020 HCV Screening Recommendations

	Adults	Under 18 years
One-time HCV screening	<ul style="list-style-type: none"> All adults 18 to 79 years of age All pregnant people during each pregnancy <p>(CDC, USPSTF)</p>	<ul style="list-style-type: none"> All children born to women infected with HCV People under 18 with HCV risk factors <p>(AASLD, IDSA, IAS-USA)</p>
Repeat HCV testing (e.g. annual)	<p>Adults with HCV risk factors, including:</p> <ul style="list-style-type: none"> People with a history of or active injection drug use HIV-positive men who have unprotected sex with men <p>(CDC, USPSTF, AASLD, IDSA, IAS-USA)</p>	

Recommended Screening Methods

- For people of unknown HCV status
 - Screen using HCV antibody with reflex to HCV RNA testing
- For people with a history of HCV infection
 - Screen with HCV RNA

Implementing Routine HCV Screening at Brookdale Hospital, Brooklyn

Alexis Fields, MPH

Jessica Yager, MD, MPH

Brookdale Serves Nearly 100,000 Unique Patients



**Main Hospital
(Inpatient & Outpatient sites)**



Emergency Department



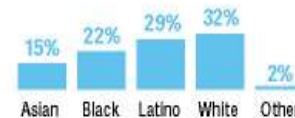
Family Care Clinics (5 total)

Brownsville Resident Demographics

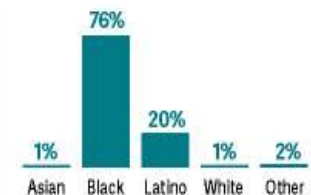
- Our health facilities are located in or near Brownsville
- Predominantly Black and Latino communities
- Nearly a third of residents are born outside the U.S.
- 28% of residents live in poverty

POPULATION
BY RACE AND
ETHNICITY^

New York City



Brownsville



BORN OUTSIDE
THE US



Brownsville HCV Incidence

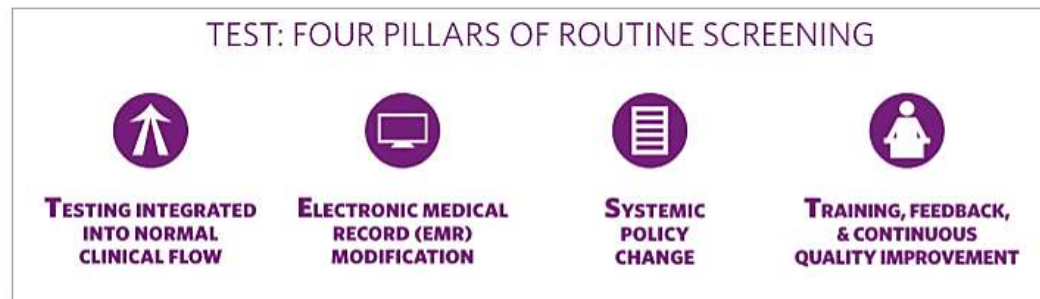
NEW HEPATITIS C REPORTS (per 100,000 people)



Source: NYC DOHMH, Communicable Disease Surveillance Registry, 2016

Gilead FOCUS: Frontlines of Communities in the U.S. Mission & Guiding Model

- **Enables partners to develop & disseminate best routine screening and linkage practices for HIV, HCV, and/or HBV** in accordance with national screening guidelines
- Public health initiative **launched in 2010** focused on HIV screening/linkage; **added HCV in 2013**
- **Over 300 partnerships** (e.g., hospitals, health departments, CBOs)
- Prioritizes a systems change approach



FOCUS funding supports HIV and HCV screening and linkage to the first medical appointment. FOCUS partners do not use FOCUS awards for activities beyond linkage to the first medical appointment.

HCV Screening Process (Example)

EMR

- Indicates patients meeting criteria for opt-out HCV screening
- Automatically triggers EPIC pop-up or BPA to order HCV test

Provider

- Explains routine testing with opt-out consent

Blood draw

- HCV AB w/ reflex test sent with other ordered labs

Lab

- Positive HCV AB tests sent out for viral load testing

EMR

- Positive HCV AB test info sent to patient navigators for outreach and linkage

EPIC Best Practice Alert (BPA)

HCV Testing Algorithm/ Criteria

- Age 13 to 19 and has never had an HCV test
- Age 20 - 34 and has had no HCV test in the last 5 years
- Age 35 plus and has had no test in the last 10 years

EPIC BPA (simulated image)

Provider Prompt: To provide the best care for our Brookdale community, we aim to routinely test all patients for HCV. If you have your blood drawn today, you will be tested unless you decline. If you do NOT want to be tested today, please let me know.

Order HCV Test

Do Not Order HCV Test

Declination Reason:

Patient already tested

Confidentiality Concern

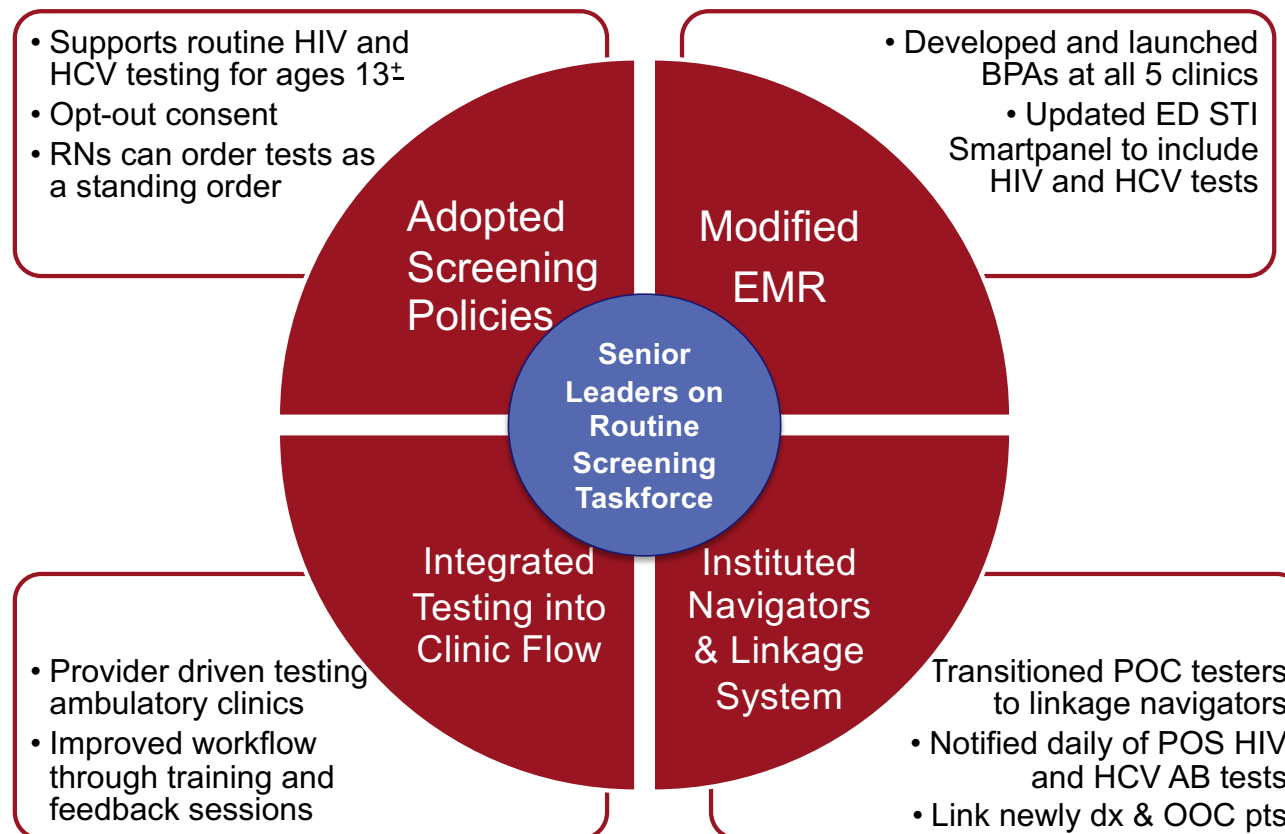
Known Positive

Patient unable to consent

Patient DOES NOT want to know

Prefer to test in another setting

Accomplishments



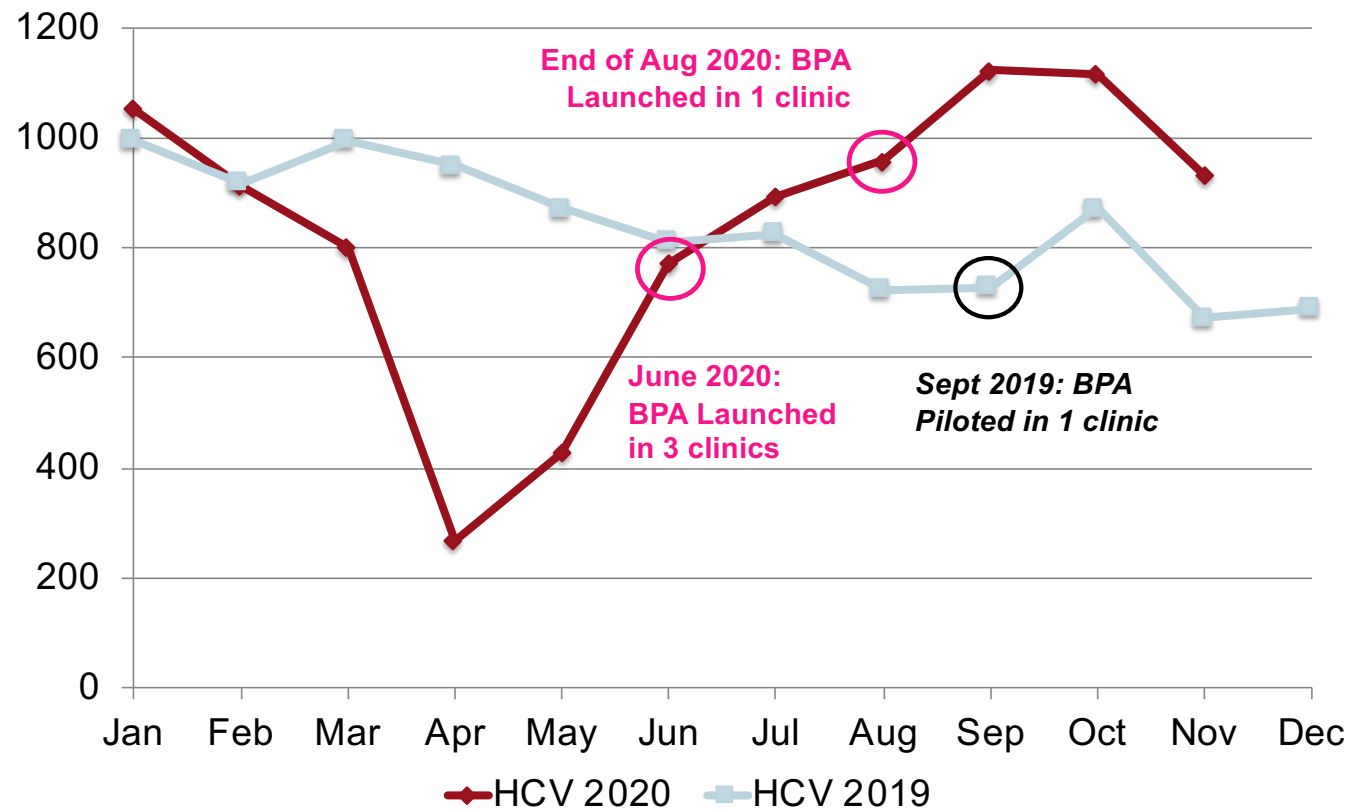
HCV Screening Implementation

Facilitators	Challenges
Engaged and Supportive Leadership <ul style="list-style-type: none">• Routine Screening Taskforce (6 meetings/year)• Adoption of org-wide screening policies	Lab Turnaround: HCV RNA send out test (3-5 days)
Dedicated Staff & Funding	Staff Turnover: EPIC Analysts and & ED Champion <ul style="list-style-type: none">• Delayed BPA builds & reports
Interdisciplinary Communication <ul style="list-style-type: none">• Provider training & feedback sessions• Ongoing workflow meetings	Linkage: <ul style="list-style-type: none">• Patient population difficult to reach (unstable housing and/or phone access)• Patient's insurance may not be accepted by their local hospital

Outcomes 2019 vs 2020

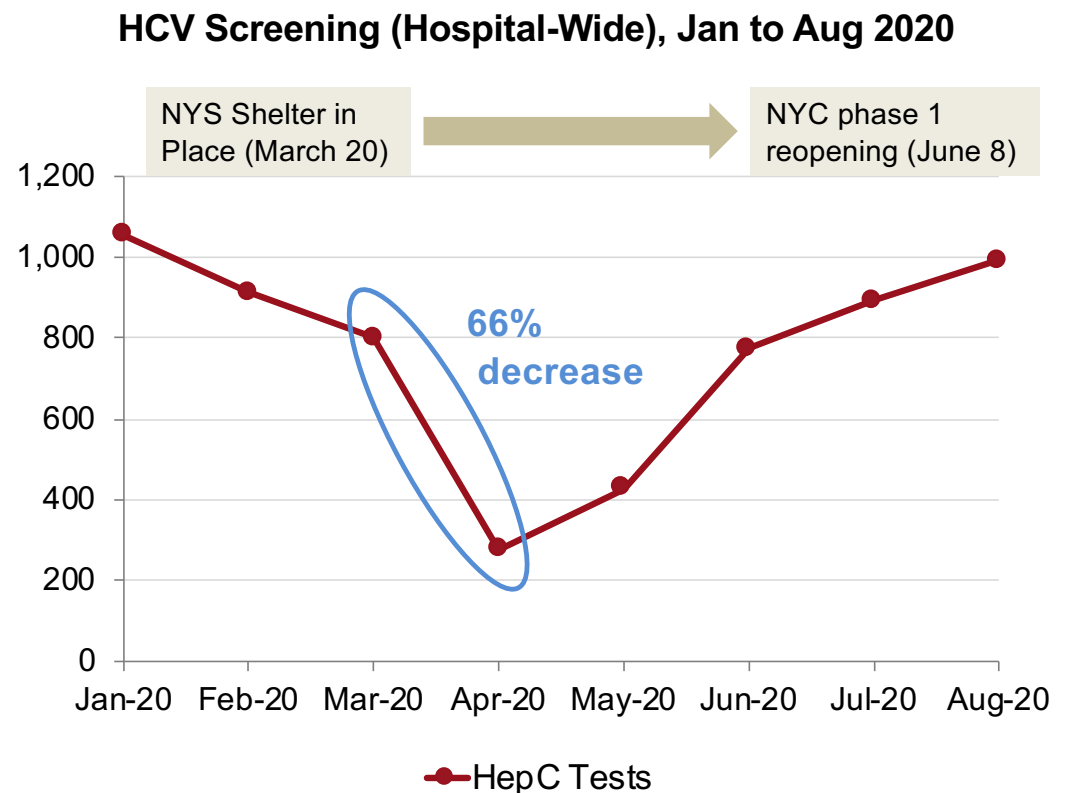
- Automated HCV screening (via BPA) active in all outpatient clinics by Sept 2020
- From Aug'20 to Sept'20 HCV testing increased 17%.
- Sept'20 vs. Sept '19: HCV testing increased 54%
- Prior to BPA: Screened pts born between 1945 and 1965
- Now: Screen pts 13 and older (BPA automated algorithm)

Hepatitis C Tests



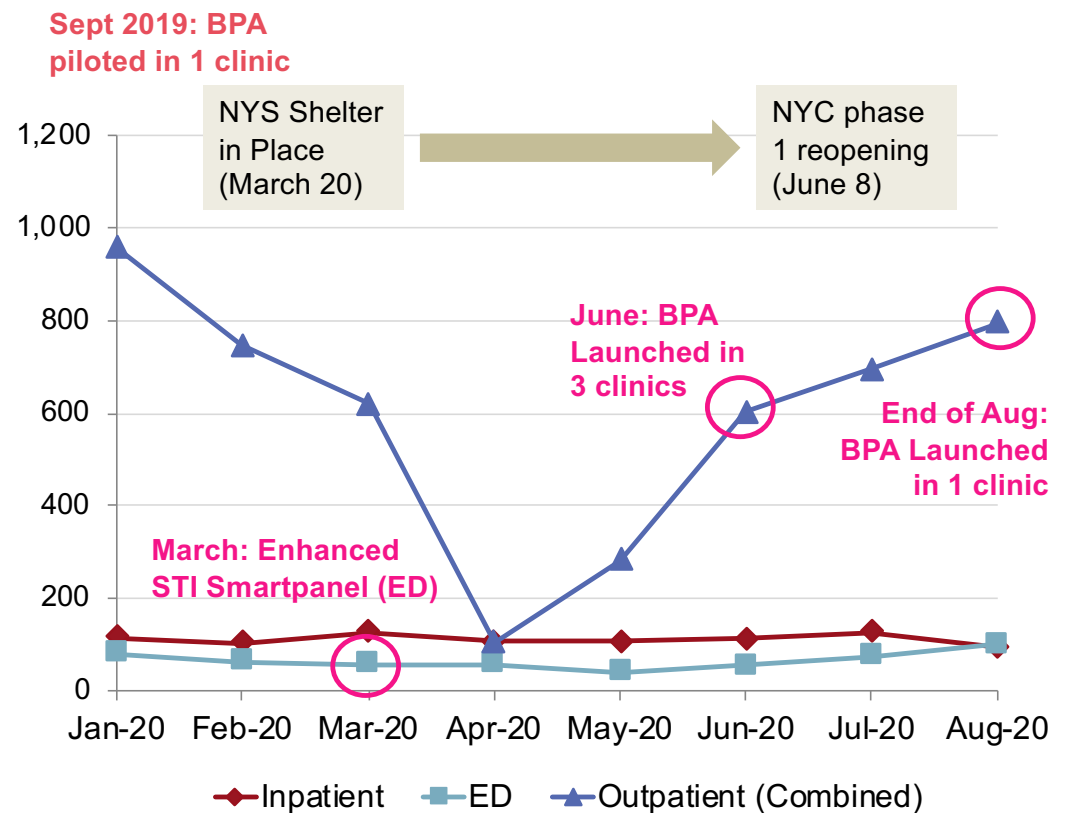
Routine HCV Screening During COVID-19: Hospital-Wide

- Automated, routine HCV screening continued per protocol
- Unique patient visits decreased 42% from Jan to April
- Providers increased telemedicine use (also prompts screening)
- Linkage - patient navigators switched to remote work
 - Observed patients delay/avoid visits due to Covid-19 concerns



Routine HCV Screening During COVID-19: By Site

- Screening active in 5/5 outpatient clinics
 - Activation of automated screening at 3 sites corresponded with NYC's phase 1 reopening in June
- Emergency Department
 - Enhanced STI panel to ensure more consistent HCV testing for pts with STI exposure
 - In-process of developing automated screening
- HCV Screening
 - From March to April screening decreased at all sites, except the ED
 - By August outpatient screening returned to pre-covid levels (partially attributable to BPA activation)



Implementation Resources

Staff

- Director
- Program Manager
- Data Manager
- 3 Patient Navigators - (HIV/HCV linkage)

Lab Capabilities

- In-house HCV Ab testing
- Added reflex testing

Electronic Health Record

- EPIC

Next Steps

- Develop and launch ED-specific BPA with nurse triage workflow to increase HCV testing
- Develop an inpatient setting testing workflow
- Continue to support and train staff
- Gather ongoing feedback to optimize workflow



Implementing Routine HCV Screening at Brownsville Multi-Service Family Health Center (BMS), Brooklyn

Jesi Ramone, MD, AAHIVS

HCV Screening in Patients 18yrs +

- Goal: 85%
- Test: HCV Ab with reflex to HCV RNA

March 2019	June 2019	Sept 2019	Dec 2019	March 2020	June 2020	Sept 2020
85%	87%	86%	87%	75%	78%	81%
2,749/ 3,233	2,801/ 3,236	3,027/ 3,536	3,024/ 3,485	12,082/ 16,051	11,793/ 15,103	11,980/ 14,733

Performance Improvement Process

- Ongoing staff education to ensure that all clinical staff is aware of the new universal HCV screening recommendations reflected in BMS HCV Screening Policy
 - Policy was approved by Q&P Committee and shared with clinical team
- Consistent review of Quality tab in Athena to identify patients not screened at all visit types

Improvements Implemented

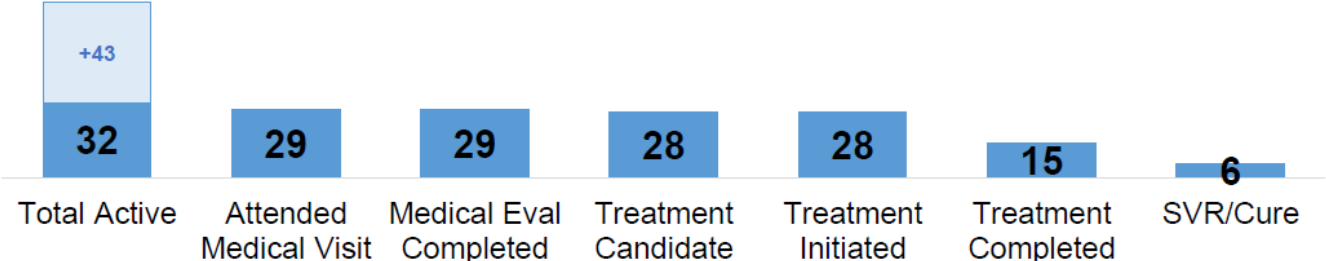
- PCAs and Nursing staff delegated to order HCV screening
- Order set created to ensure HCV screening is included in initial visit lab testing of all adult patients
- Continuing education on HCV epidemiology, morbidity and mortality and importance of HCV screening and treatment

Assessment of Effectiveness of Actions

- Since change in screening policy to universal screening, there was an apparent decline in screening as the denominator markedly increased 4 times
- Evidence of effectiveness: 6% increase in screening rate since 3/2020

Care Cascade and Demographics of HCV-Diagnosed Patients at BMS

Care cascade



Patient demographics

Patient Characteristics	
Insurance: Medicaid	69%
Homeless/unstably housed	6%
Mental health issue	31%
Alcohol use in past year	34%
Drug use in past year (injection/intranasal)	28%
Methadone treatment	53%
Buprenorphine treatment	3%
History of Incarceration	59%

Comorbid Conditions	
HIV positive	6%
Hep B positive	0%
Cirrhotic	31%
Liver cancer	0%

2020



Comparative Table of HCV Screening Rates within Community Health Center Association of NYS (CHCANYS)

CENTERS	RESULT	CHANGE	NUM	DENOM	EXCL
Callen-Lorde	86%	+ 3% ▲	13155	15234	0
APICHA Community ...	81%	+ 1% ▲	3721	4573	0
VIP Community Servi...	79%	+ 8% ▲	2121	2698	0
Brownsville Commun...	74%	+ 5% ▲	9476	12783	0
Harlem United Healt...	65%	+ 11% ▲	2618	4010	0
Housing Works	65%	+ 6% ▲	5513	8455	0
Acacia Network	63%	- 7% ▼	6864	10933	0
Betances Health Cen...	62%	+ 3% ▲	2516	4060	0
Bedford Stuyvesant F...	61%	+ 1% ▲	7269	11957	0
Morris Heights Healt...	56%	+ 3% ▲	20202	36142	0
Health Care Choices	53%	- 2% ▼	1936	3624	0
CHI Health Center	46%	+ 5% ▲	1037	2255	0
Boriken Neighborho...	45%	- 4% ▼	3368	7445	0

5% Increase of screening across the network of 49 centers since July 2019

Source: Azara, July 2020

Resources for NYC HCV Capacity Building

- NYS HCV CEI Clinical Consultation Hotline:
(866) 637-2342 (leading hepatologist will answer questions)
- NYC HCV resources: www.nyc.gov/health/hepc
 - Free or low-cost referrals for care
 - Programs with supportive services
 - Patient education materials
- HepFree.NYC – Citywide network building capacity to prevent, manage and treat hepatitis B and C in NYC
 - [Telehealth capacity building resources](#)

Contact Us

For CMEs or educational opportunities, contact:

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