

Data-to-care Model Using Facility-specific Hepatitis C Dashboards

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Hepatitis C Dashboards

- Developed dashboards for acute-care hospitals and community health centers in New York City
- Dashboards contain two metrics calculated using Health Department surveillance data
 - RNA confirmation rate
 - Treatment initiation rate
- Dashboards distributed annually to hospitals since 2017

Hepatitis C Clinical Exchange Network



Peer-to-peer learning collaborative since 2014



Increase clinical capacity for screening, diagnosing, managing and treating hepatitis C



97 Participating providers at 40 acute care hospitals, in gastroenterology, infectious disease and primary care



Dashboards as data-to-care tool to support implementation of quality improvement initiatives

Surveillance Registry

- Electronic laboratory reporting since 2006
- Receive all positive antibody, positive and negative RNA tests for all New York City residents
- Includes the name and address of the ordering facility

Identifying Facilities from Surveillance Data

- Ordering facility names and addresses on reported laboratory tests can require cleaning
 - Misspellings, variations all need to be accounted for
- Hospitals can have multiple addresses within the same complex, satellite buildings, multiple campuses, or outpatient clinics
 - Work with facilities to determine what sites to include

NEW YORK METHODIST HOSPITAL | 7187803000 | 506 SIXTH STREET | BROOKLYN | NY | 11215 | | | |	330
NEW YORK METHODIST ROP INTERFA | 3474424558 | 506 6TH ST LAB RECEIVING FL 2 | BROOKLYN | NY | 11215 | | | |	31
NEW YORK METHODIST ROP INTERFA | 3474424558 | 506 6TH ST | BROOKLYN | NY | 11215 | | | |	247
NEW YORK PRESBYTERIAN BROOKLYN METHODIST HOSPITAL | 7187803000 | 506 6TH STREET | BROOKLYN | NY | 11215 | | | |	23
NY METHODIST FACULTY PRACTICE | 7182466000 | 265 7TH AVE. SUITE 5A | BROOKLYN | NY | 11215-3693 | | | |	12
NY METHODIST GASTROENTEROLOGY | 7182468600 | 263 7TH AVE STE 5A | BROOKLYN | NY | 11215 | | | |	3
NY METHODIST-PRIVATE PHYS CPU | 7187803000 | 506 6TH ST LAB REC 2ND FL | BROOKLYN | NY | 11215 | | | |	6
NY METHODIST-PRIVATE PHYS CPU | 7187803000 | 506 6TH ST | BROOKLYN | NY | 11215 | | | |	111
NY PRESBYTERIAN BROOKLYN | 7187803640 | 506 6TH ST LAB REC 2ND FL | BROOKLYN | NY | 11215-9008 | | | |	18
NY PRESBYTERIAN BROOKLYN | 7187803640 | 506 6TH ST | BROOKLYN | NY | 11215-9008 | | | |	366
NYM ASSOCIATES | 7187450000 | 13734 5TH AVE 2ND FLOOR | BROOKLYN | NY | 11215 | | | |	6

RNA Confirmation Metric

- Percentage of people with ≥ 1 positive antibody test from a facility who have ≥ 1 RNA test ordered within 3 months from the same facility
- Person-level, not a per-antibody test metric

Patient ID	Test name	Result	EIA test date	Ordering facility- EIA test	RNA test date 1	RNA test date 2	RNA test date 3	RNA test date 4	RNA test date 5	Ordering facility- RNA test
100010003	Hep C antibody screen (EIA)	Positive	1/20/2018	Facility A	1/20/2018	.	.	.	.	Facility A
100010003	Hep C antibody screen (EIA)	Positive	2/10/2018	Facility B	2/11/2018	3/15/2018	.	.	.	Facility B
100010003	Hep C antibody screen (EIA)	Positive	3/14/2018	Facility B	2/11/2018	3/15/2018	.	.	.	Facility B
100010003	Hep C antibody screen (EIA)	Positive	6/1/2018	Facility C	.	.	.	.	.	Facility C

Treatment Initiation Metric

- **Patient assignment:** based on the location of a person's last reported positive RNA test in the prior year, assign the person as a patient of that facility
- **Treatment initiation:** from the time of that last positive test, at least one negative RNA test result in the following year*
 - If ≥ 1 subsequent negative RNA test comes from the patient's assigned facility, treatment attributed to that facility
 - Otherwise, treatment initiation assigned to elsewhere in NYC
- Percentage of assigned patients initiating treatment by the end of the following year

Treatment Initiation Example

- Patient assignment at the end of 2016
- Treatment initiation by the end of 2017

Patient ID	RNA test result	RNA test date	Ordering facility
100010003	Positive	4/7/2016	Facility A
100010003	Positive	8/9/2016	Facility B
100010003	Positive	11/23/2016	Facility A
100010003	Positive	2/7/2017	Facility A
100010003	Negative	7/7/2017	Facility C
100010003	Negative	8/21/2017	Facility A

Testing Patient Assignment

- Is only one positive RNA test 'enough' to call someone a patient of a given facility?
 - Are some people really patients elsewhere and receiving care and treatment at another facility?
- Tested a stricter definition of patient assignment: at least one additional HCV test from the same facility ordered within ± 6 months
- People with one positive RNA test, but not this additional test, were treated at a much lower rate (30% vs 60%) than those that had this additional test
 - **Conclusion: Hospitals need to prioritize care and treatment for all individuals that test RNA positive at their facilities; they cannot assume patients are receiving treatment elsewhere**

Dashboards since 2017

2017

2018

2019



NEW YORK CITY DEPARTMENT OF HEALTH AND MENTAL HYGIENE
Mary T. Bassett, MD, MPH Commissioner

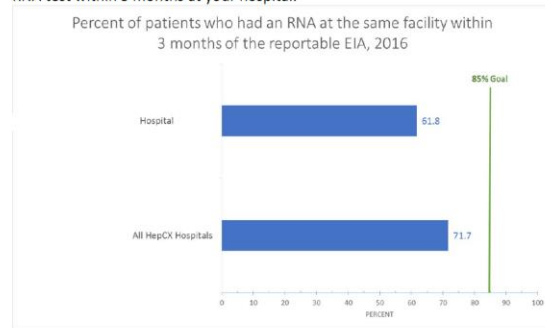
42-09 28th Street
Queens, NY 11101-4132
(347) 396-2416 tel
(347) 396-2558 fax

Dear Colleague,

We are pleased to provide you with your hospital's 2016 *Hepatitis C Dashboard*. The Dashboard is a component of the Hepatitis C Clinical Exchange (HepCX) network of 36 hospitals who aim to increase their facilities' capacity to screen, link to care, and cure New York City residents with hepatitis C.

This year, one key indicator was selected: Hepatitis C (HCV) RNA Confirmation Rate. This selection is based on research that shows that among persons who have a positive anti-HCV result in New York City, one third did not receive an HCV RNA test to confirm infection status within 6 months of the initial diagnosis.¹ In the future, the hospital dashboards will include facility-based *Treatment and Cure Rates*.

Your hospital's performance on this indicator was assessed using viral hepatitis surveillance laboratory data reported to the New York City Department of Health and Mental Hygiene. Of the 576 number of patients who had a positive antibody test (EIA=enzyme immunoassays) done at your hospital in 2016, 61.8% received a confirmatory RNA test within 3 months at your hospital.



We have included the addresses linked to your hospital in the attached FAQ page which also answers common questions you might have about the dashboard. Kindly reply by Monday, July 31 2017 confirming that the list of addresses represents all locations from which your hospital orders lab tests.

We welcome questions and feedback on this dashboard at hcvdashboard@health.nyc.gov

Regards,
Ann Winters, MD
Medical Director, Viral Hepatitis Program
Bureau of Communicable Disease



Dear Colleague,

We are pleased to provide you with your hospital's 2017 *Hepatitis C Dashboard*. This year, the dashboard includes two indicators covering two years of data: RNA confirmation and treatment initiation rates, 2016-2017.

RNA Confirmation Rates, 2016-2017*

Figure 1: RNA Confirmation at Z Hospital

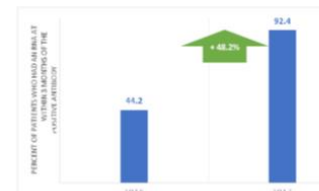
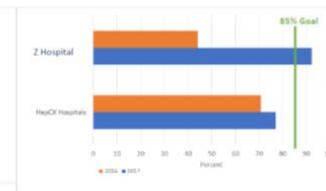


Figure 2: RNA confirmation at Z Hospital, with HepCX Hospitals Average

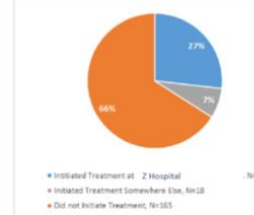


*The RNA confirmation rate estimates the percentage of patients with a positive HCV antibody test who received an HCV RNA test within three months.

In 2017, of the 642 patients who had a positive antibody test performed at your hospital, 593 (92.4%) received a confirmatory RNA test within three months. In 2016, of the 659 patients with a positive antibody test, 291 (44.2%) received an RNA test within three months.

Treatment Initiation Rate, 2016-2017

Figure 3: Percent of Z Hospital patients with a positive RNA test in 2016 who subsequently initiated treatment in 2016-2017



Of the 250 patients whose last positive RNA test in 2016 was performed at Z Hospital, 67 (27%) subsequently initiated treatment at Z Hospital and 18 (7%) initiated treatment at another facility in New York City by the end of 2017. This indicates that 165 (66%) Z Hospital patients with a positive RNA test were not linked to care and treated by any provider in New York City.

Of the 10,533 patients whose last positive RNA test in 2016 performed at one of the 39 HepCX hospitals, 5,742 (54.5%) did not initiate treatment anywhere in New York City.

Linkage to care is an important first step towards treatment initiation for patients diagnosed with HCV. To improve the care continuum for these diagnosed patients and increase the number of patients who initiate treatment, the Health Department can provide support to your hospital. Your hospital's performance on these indicators was assessed using viral hepatitis surveillance laboratory data reported to the New York City Department of Health and Mental Hygiene. Site addresses linked to your hospital are listed in the attached FAQ document, which also answers common questions you might have about the dashboard. The HCV Dashboard of hospitals with high screening rates will be made public on the nyc.gov/health website in the fall.

If you notice any discrepancies compared with what you see in your hospital's EMR for these indicators, please contact us at hcvdashboard@health.nyc.gov. Questions and comments are also welcome.

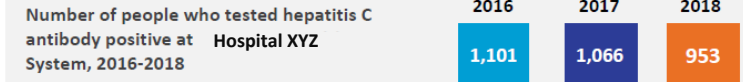
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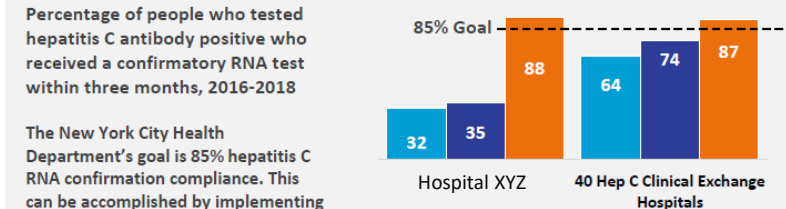
Hepatitis C Testing and Treatment Dashboard Hospital XYZ

2016-2018 New York City Health Department Surveillance Data

Hepatitis C Antibody Testing

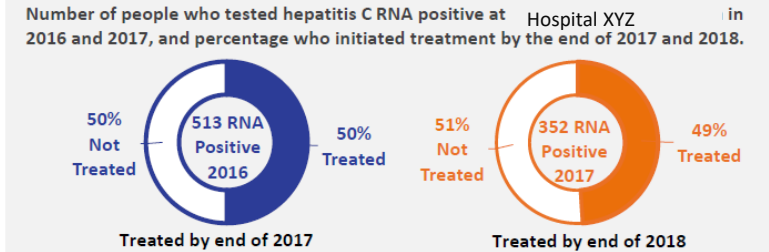


Hepatitis C RNA Confirmatory Testing



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



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 hcp@health.nyc.gov.

Targeted Technical Assistance

- Engage with providers and hospital leadership to increase capacity to treat through provider training
- Identify facilities in need of support for the implementation of reflex to RNA testing
- Offer EMR query tool for providers to monitor patients through the care continuum
- Promote initiatives to support patient outreach and improve linkages to care

Hospital Leadership Responses

“We have received the HCV Dashboards for [our hospital], and really appreciate the report! We will share it with all of our staff at [our infectious disease program], and with our hospital leadership, and brainstorm ideas for improving linkage to care for HCV positive patients.”

“This report is really great. We’re using it to convince our leadership to implement universal testing at our clinics.”

“We are falling short on the treatment part.[...] Obviously, we need to do more on this.”

“It would be extremely useful for us if you could provide us with the list of patients that you have identified as hep C positive and requiring treatment. We could cross match with our own list, determine why treatment was not provided at [our hospital] and seek resources for more aggressive linkage to care for these specific individuals.”

Providing Patient Lists

- Support providers follow-up on patients in need of linkage to care
- Dashboard data are not real-time, surveillance data are
- Tension between providing up-to-date data vs providing data reflective of dashboard metrics

Conclusions and Lessons Learned

- Dashboards helpful for situational awareness, quality improvement, targeted technical assistance
- Dashboard development requires extensive analytic time and capability
 - Need generally complete and comprehensive surveillance system
 - Reporting of both negative and positive RNA tests
 - Query-able system and ability to ID ordering facilities
 - Analyst and programmatic time
 - Relationships with facilities

Contact Information

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