Quality Improvement Profile

The NYSDOH/AIDS Institute's HIV Quality of Care Program has compiled crucial information from your HIV quality improvement (QI) program into a single profile report.

This report is intended for use within the AIDS Institute and the reporting medical organization and is not intended for outside dissemination.

This quality profile contains longitudinal performance data on key quality indicators derived from the organizational HIV treatment cascade self-review, such as viral load suppression. It highlights quality improvement plans developed by the organization based on results of the review, consumer involvement in this process, as well as feedback from the quality coach and contract manager. Capacity building information such as participation in a quality learning network or regional group is also included. Please use this report to review the HIV QM program's effectiveness and to make changes if needed. Also, please let us know if there is an update that should be made to the contact information. If you have any questions or would like to request technical assistance or coaching for your HIV QM program, please contact Dan Belanger at Daniel.Belanger@health.ny.gov.

Cascade Submission Date:
Review closed November 2023

QI Profile Completion Date:

April 2024

Latest Revision Date:

April 2024

Program Name: St. Barnabas Health System

Clinic Information

| Type of Clinic | Clinic Name | Address | City | Zip |
|----------------|--|-------------------|-------|-------|
| Hospital | Pathways Center for Comprehensive Care | 4422 Third Avenue | Bronx | 10457 |

Important Contacts

| HIV Medical Director | Jonathan Samuels | jsamuels@sbhny.org | (718) 960-6265 |
|---------------------------|----------------------|-------------------------|----------------------------|
| HIV Program Administrator | Manisha Kulshreshtha | mkulshreshtha@sbhny.org | Phone number not available |
| Lead QI Contact | David Mendez | dmendez@sbhny.org | (718) 960-3586 |
| Contract Manager | N/A | N/A | N/A |
| NY Links Coach | Nova West | Nova.west@health.ny.gov | (212) 417-4542 |

Regional Group/Learning Network Participation

Affiliation: New York Links, NYCDOH Bronx Knows

Participated in Group QI Project: N/A

Focus: N/A

NYS Quality of Care Program: Quality Management Profile 1

Organizational HIV Treatment Cascade

Definitions of Key Indicators

On ARV Therapy: Documented prescription of one or more antiretroviral medications at any time during the review year.

Any VL Test: Documentation of at least one viral load test at any time during the review year.

<u>VL Test within 91 Days (Newly Diagnosed Patients)</u>: Documentation of at least one viral load test performed within 91 days of initial HIV diagnosis.

<u>Suppressed Final VL</u>: A value of less than 200 copies/mL on the final viral load test during the review year. Patients with no documented viral load test during the review year are scored as unsuppressed.

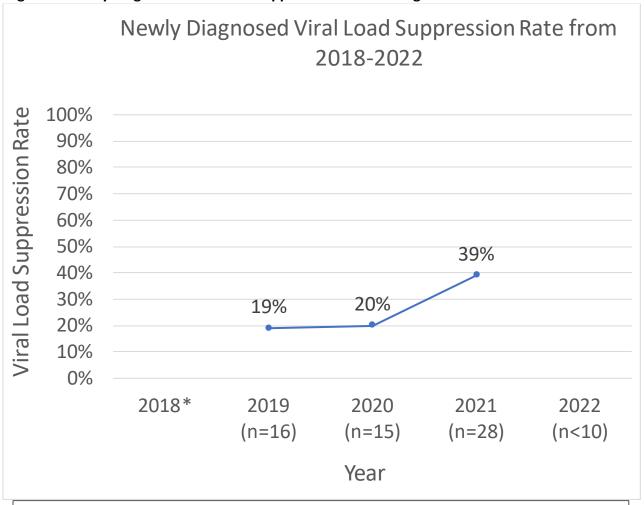
<u>Suppressed within 91 Days (Newly Diagnosed Patients)</u>: A value of less than 200 copies/mL on any viral load test performed within 91 days of initial HIV diagnosis. Patients with no documented viral load test during this period are scored as unsuppressed.

3-day Linkage to Care (Patients Newly Diagnosed Within the Organization): A time interval of three days or less from initial HIV diagnosis to provision of HIV care. Prior to 2019, documentation of HIV care was based exclusively on visit history (seen by a provider who could prescribe ARVs, whether or not this was done), and an exception was made in 2017 (only) for individuals seen as inpatients (linkage within 30 days); beginning in 2019, documentation of first ARV prescription was also used for this, and there were no exceptions to the 3-day limit.

NOTE: Data are not reported for subpopulations of fewer than 10 patients. This is done to address any concerns about confidentiality and avoid possible misinterpretation of results based on small populations.

Key Indicators From 2017-2022

Figure 1. Newly Diagnosed Viral Load Suppression Rates at Organizational Level from 2018-2022

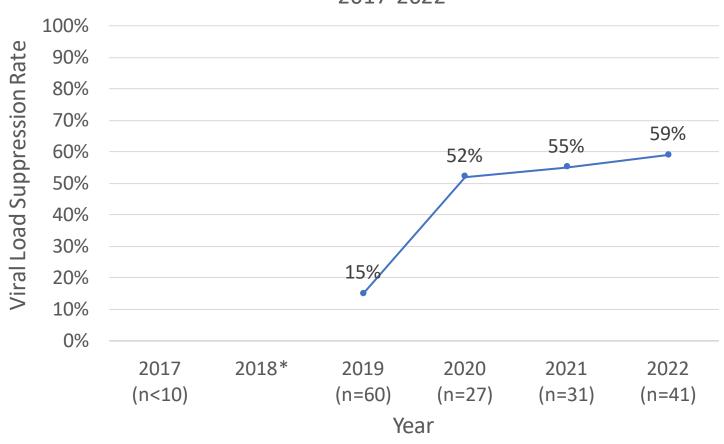


Note: Data redacted due to small number of applicable patients (fewer than 10).

^{*}Did not receive usable data for St. Barnabas Health System in the review of care provided in 2018.

Figure 2: New to Care (Other than Newly Diagnosed) Viral Load Suppression Rates at Organizational Level from 2017-2022

New to Care (Other than Newly Diagnosed) Viral Load Suppression Rate from 2017-2022



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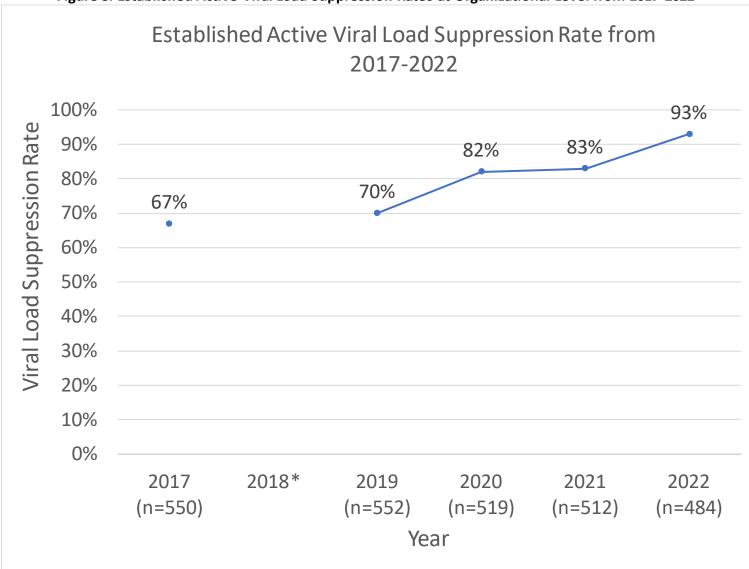


Figure 3: Established Active Viral Load Suppression Rates at Organizational Level from 2017-2022

^{*}Did not receive usable data for St. Barnabas Health System in the review of care provided in 2018.

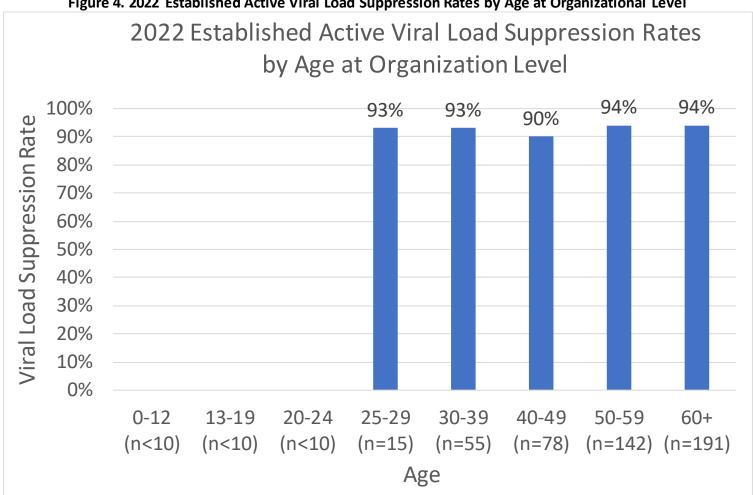


Figure 4. 2022 Established Active Viral Load Suppression Rates by Age at Organizational Level

2022 Established Active Viral Load Suppression Rates by Race and Ethnicity at Organization Level 94% 100% 93% 93% 92% 90% Viral Load Suppression Rate 80% 70% 60% 50% 40% 30% 20% 10% 0% White Black/African Asian (n<10) NH/PI (n<10) AI/AN (n<10) Unknown Hispanic/ Non-Hispanic/ Unknown (n=153)American (n<10)Latino(a) Latino(a) (n<10)(n=328)(n=280)(n=204)Race Ethnicity

Figure 5. 2022 Established Active Viral Load Suppression Rates by Race and Ethnicity at Organizational Level

Note: NH/PI = Native Hawaiian/Pacific Islander; AI/AN = American Indian/Alaska Native.

NEW YORK STATE DEPARTMENT OF HEALTH AIDS INSTITUTE HIV QUALITY OF CARE PROGRAM

Table 1: Indicator Scores at Organization Level for 2017-2022

| Patient | | 2017 | | 2018 | | 2019 | | 2020 | | 2021 | | 2022 | |
|------------------------|-----------------------------|----------------|-----------------|------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|-----------------|
| Group | Indicator | Org. Score | State Median | Org. Score | State Median | Org. Score | State Median | Org. Score | State Median | Org. Score | State Median | Org. Score | State Median |
| Newly Diagnosed | 3-day Linkage to Care | 29% (n=17) | 65% | | 41% | 38% (n=16) | 52% | 17% (n=12) | 55% | 14% (n=21) | 61% | (n<10)* | 53% |
| | On ARV Therapy | (n<10)* | 91% | | 96% | 81% (n=16) | 100% | 80% (n=15) | 100% | 71% (n=28) | 100% | (n<10)* | 100% |
| | VL Test within 91 Days | ** | ** | | 93% | 81% (n=16) | 95% | 80% (n=15) | 95% | 68% (n=28) | 92% | (n<10)* | 96% |
| | Suppressed Final VL | (n<10)* | 65% | ** | ** | ** | ** | ** | ** | ** | ** | ** | ** |
| | Suppressed within 91 Days | ** | ** | | 45% | 19% (n=16) | 50% | 20% (n=15) | 46% | 39% (n=28) | 50% | (n<10)* | 50% |
| | Baseline Resistance Test | ** | ** | ** | ** | 100% (n=11) | 74% | 64% (n=11) | 80% | 94% (n=17) | 82% | (n<10)* | 80% |
| Other New to Care | On ARV Therapy | | 96% | | 97% | 100% (n=60) | 100% | 100% (n=27) | 100% | 100% (n=31) | 100% | 98% (n=41) | 100% |
| | Any VL Test | (n<10)* | 97% | | 99% | 98% (n=60) | 98% | 100% (n=27) | 100% | 100% (n=31) | 100% | 95% (n=41) | 98% |
| | Suppressed Final VL | | 70% | | 74% | 15% (n=60) | 78% | 52% (n=27) | 77% | 55% (n=31) | 69% | 59% (n=41) | 78% |
| Established Active | On ARV Therapy | 99% (n=550) | 99% | | 99% | 100% (n=552) | 99% | 100% (n=519) | 93% | 99% (n=512) | 99% | 100% (n=484) | 100% |
| | Any VL Test | 99% (n=550) | 99% | | 99% | 100% (n=552) | 99% | 100% (n=519) | 97% | 99% (n=512) | 98% | 99% (n=484) | 98% |
| | Suppressed Final VL | 67% (n=550) | 88% | | 88% | 70% (n=552) | 89% | 82% (n=519) | 87% | 83% (n=512) | 88% | 93% (n=484) | 89% |
| Open Previously | On ARV Therapy | 60% (n=907) | 92% | | 95% | 50% (n=1881) | 96% | 62% (n=1831) | 96% | 52% (n=1543) | 97% | 66% (n=931) | 97% |
| Diagnosed (Active & | Any VL Test | 60% (n=907) | 92% | | 93% | 36% (n=1881) | 93% | 35% (n=1831) | 90% | 36% (n=1543) | 94% | 56% (n=931) | 93% |
| Inactive) | Suppressed Final VL | 41% (n=907) | 80% | | 80% | 20% (n=1881) | 83% | 23% (n=1831) | 77% | 28% (n=1543) | 79% | 50% (n=931) | 83% |

Note: Did not receive usable data for St. Barnabas Health System in the review of care provided in 2018.

^{*} Data redacted due to small number of applicable patients (fewer than 10).

^{**} Data for this indicator were not requested for this review.

Table 2: Viral Load Suppression by Established Active Patient Demographic Group at Organization Level for 2022

| | | | PP : 000. | <u> </u> | | | A G | | | <u> </u> | <u> </u> | <u> </u> | ization | | 00 |
|---------------------------------|--|--------|------------------|------------|-----------------------|---------------------------|------------------------|----------------------|-----------------|--------------------|----------|-------------------|---------|-----------------|-----|
| 0-12 | | 13-19 | | 20-24 | | 25-29 | | 30-39 | | 40-49 | | 50-59 | | 60+ | |
| n | % | n | % | n | % | n | % | n | % | n | % | n | % | n | % |
| <10* | | <10* | | <10* | | 15 | 93% | 55 | 93% | 78 | 90% | 142 | 94% | 191 | 94% |
| GENDER | | | | | | | | | | | | | | | |
| Cis Male | | Cis Fe | emale | Trans Male | | Trans Female | | Other Gender | | Gender X | | Unknown Gender | | | |
| n | % | n | % | n | % | n | % | n | % | n | % | n | % | | |
| 254 | 95% | 223 | 92% | <10* | | <10* | | <10* | | <10* | | <10* | | | |
| RACE | | | | | | | | | | | | | | | |
| White Black/African American | | | Asian | | Native Hawaiian/PI | | American Indian/ AN | | Unknown Race | | | | | | |
| n | % | n | % | n | % | n | % | n | <i>,</i> % | n | % | | | | |
| 153 | 93% | 328 | 93% | <10* | | <10* | | <10* | | <10* | | | | | |
| | | | | | | | ETHNI | CITY | | | | | | | |
| | Hispanic, Non-Hispanic, Latino, Latina | | Unkn Ethni | | | | | | | | | | | | |
| n | % | n | % | n | % | | | | | | | | | | |
| 280 | 94% | 204 | 92% | <10* | | | | | | | | | | | |
| | | | | | | R | ISK F | ACTOR | <u> </u> | | | | | | |
| IDU | IDU Risk | | osexual isk | MSM | | Hemophilia or Coagulation | | Blood Transfusion | | Perinatal | | Other Risk | | Unknown | |
| n | % | n | % | n | % | n | % | n | % | n | % | n | % | n | % |
| 19 | 89% | 362 | 93% | 97 | 94% | <10* | | <10* | | <10* | | <10* | | <10* | |
| | | | | | | нοι | SING | STAT | U S | <u> </u> | | | | | |
| Stable | Stable Housing Unstably Housed | | Tempo Hou | , | Unknown Housing | | | | | | | | | | |
| n | % | n | % | n | % | n | % | | | | | | | | |
| 484 | 93% | <10* | | <10* | | <10* | | | | | | | | | |
| | | | | | | INS | URAN | CE TY | PΕ | | | | | | |
| ADAP | | Dual E | ligible | Medicaid | | Medicare | | Private Insurance | | Veteran's Admin | | Other | | No Insurance | |
| n | % | n | % | n | % | n | % | n | % | n | % | n | % | n | % |
| 51 | 96% | 73 | 92% | 312 | 92% | <10* | | 15 | 100% | <10* | | 25 | 100% | <10* | |
| Unkr | nown | | | | | | | | | | | | | | |
| n | % | | | | | | | | | | | | | | |
| <10* | | | | | | | | | | | | | | | |

^{*} Data redacted due to small number of applicable patients (fewer than 10).

Quality Improvement Interventions for 2023 (Self-reported based on 2022 results)

Methodology

We obtained data for the primary care patients at the Pathways Center from the monthly visit volume reports created specifically for Pathways. The Pathways case list is created during the year, identifying newly diagnosed and new to care patients, along with the patients with a history at Pathways. The case managers assisted in verifying demographic data elements. Antiretroviral information was entered during the year. We used year-end, system generated, viral load results reports to identify viral suppression. We created a file of all newly diagnosed cases, whether seen at Pathways or not, during the review year. David Mendez, Administrative Director of Pathways Center created and reviewed this segment of the cascade. The "open" caselist was created by Kimberley Campbell, Data Analyst, using the data elements table issued with the Cascade. We used HIV infection ICD-10 codes for inclusion in the report as they are identified in visit history. All information was taken from the hospital Electronic Medical Record. Kimberley scrubbed the report to capture any misdiagnosing by searching for HIV negative results in the review year.

One limitation in the data source for the open case list is the possibility of miscoding by registration staff or medical staff. Favio Frere and Vanessa Lopez, Population Health Analysts reviewed records to identify any patients with missed incorrect diagnoses and to remove duplicates, ensuring that only one medical record number was attached to each respective patient. They combined the lists with the Pathways list and placed them in the cascade template. They ran the data error reports to ensure accuracy. David Mendez, Moray Joslyn, AVP and Alvin Lin, VP reviewed all data and analysis. They identified the need to continue the existing viral suppression projects. This plan was shared with Drs. Berger and Samuels at Pathways.

Key Findings

Many outcomes were consistent with our expectations, as they've been consistent over the past several years. We observed a drop in numbers from last year. This was fully investigated, and the data for last year and this year were both re-run. Data validation confirmed that both years' data were correct. We are pleased to note a strong increase in viral load suppression rates across our patient population. The team had a strong focus on this throughout the year, and also with engaging patients and bringing them in for care. We observed a drop in transgender women receiving care, and this led to a drop in viral load suppression rates. Significant efforts are underway to improve and sustain our viral load suppression rates, and to keep our patients engaged in care. Our staff team has restructured to support this. We have also initiated two new services. Our viral load suppression project is now up and running and has begun enrolling patients. Our Health Home recently received Health Home Plus designation and has begun outreaching patients for enrollment. We anticipate these developments will help us sustain performance.

Analysis:

a) Overall, our entire cascade's viral load suppression increased during 2022, particularly the active established patients caseload. The success of the "Getting to 90" Quality Improvement (QI) project was evident, as it achieved a 93% viral suppression rate for all active Pathways patients. Collaboration with Argus Community Services and implementation of the Undetectables Project contributed to this

accomplishment by providing tailored coordination services, adherence counseling, and monetary incentives for maintaining viral suppression.

- b) The open patients caseload decreased in terms of patients making contact with our organization.
- c) We also observed a decrease in the number of patients diagnosed in 2022, with 8 patients compared to 28 in 2021. Additionally, 3 out of the 8 eligible patients were linked to care within 3 days of receiving their diagnosis (3-day linkage to care for internally diagnosed patients = 38%).
- d) Using chi-square tests and p-value methodology with two categorical variables, Injection Drug Use (IDU) patients were found to have a statistically significant association with Viral Load Suppression (VLS). However, due to the low frequency of injection drug use patients who were not virally suppressed, the results may be inaccurate or misleading. Another subgroup with a statistically significant correlation to viral load suppression were patients with Medicaid as health insurance, with a chi-square value of 3.8 and a p-value of 0.04.
- e) We attempted to perform logistic regression analysis to investigate the relationship between predictor variables and the outcome of interest, viral load suppression. However, due to a significant class imbalance in the dataset, logistic regression analysis was deemed unsuitable for accurately modeling the relationship. This class imbalance could lead to biased and unreliable estimates, making it difficult to interpret the results and draw meaningful conclusions.

QI Projects

QI Project #1

Indicator: Viral load suppression among established active patients

2022 rate for this indicator: 93%

Overall 2023 goal for this indicator: 95%

Description: Achieve 95% viral load suppression among active established patients in line with the New York State

Ending the AIDS epidemic target for 2025, and the national HIV/AIDS strategy.

Sub-Goal: To improve our viral load suppression rate with the transgender female population.

Interventions: Implement EPIC Electronic Health Record (EHR) to improve clinical workflows. Provide incentives for patients with viral loads below 200 through Undetectables Grant. Reconstruct ambulatory care building to increase capacity for new patients. Plan-Do-Study-Act cycles to improve viral load suppression with the transgender female population.

QI Project #2

Indicator: 3-day linkage of internally diagnosed patients

2022 rate for this indicator: 38%

Overall 2023 goal for this indicator: 80%

Description: Increase the 3-day linkage to care rate for internally diagnosed patients from 38% to 80%.

Interventions: Enhance communication among Emergency Department (ED), inpatient, and ambulatory care teams on the new functionality in our new EPIC EMR going live in October 2023. This will ensure that individuals diagnosed with HIV are immediately linked to care and support services. This includes initiation of Anti-Retroviral

Program Summary: St. Barnabas Health System

Treatment (iART), mental health services, health insurance navigation assistance, and care for comorbid conditions. Regular training sessions will be provided for SBH Health System employees, ensuring they are equipped with the most up-to-date knowledge and best practices in HIV care. This will enhance their ability to deliver culturally competent and non-judgmental care to all patients.

Consumer Involvement

There is no Consumer Advisory Board nor any consumer involvement in our quality program.

Coach's Feedback and Updates on Cascade QI Plan

St. Barnabas Health data demonstrates significant improvement in viral suppression rate over the years. There is anticipation that the transition to a new electronic medical record might cause disruption in the current HIV treatment workflow. The data findings are in alignment with selected quality improvement projects.