

**Overview of Organizational Treatment Cascade Data and Benchmark Report Methodology**

The New York State HIV Quality of Care Program conducts annual retrospective reviews of clinical care provided at hospitals and community health centers across New York State. Recent reviews have focused on HIV cascade of care indicators. Each participating medical organization includes all HIV+ persons seen within the organization individually and without duplication (although they may match patients included in other submissions), and for each patient providers are required to include patient identifiers and information where available on sex at birth, current gender, race/ethnicity, primary language, HIV exposure risk, current housing status, diagnosis status (current or past) and HIV care enrollment status. Outcomes data are also provided for each patient as per indicators defined for particular caseloads. Measures related to antiretroviral therapy prescription, viral load testing and viral load suppression apply to all cohorts. Rates of timely linkage to care and baseline resistance testing are also calculated for newly diagnosed patients. Providers can validate their data and generate indicator scores within the data collection instrument. The Quality of Care Program asks that they use these results to develop quality improvement projects, descriptions of which, including annual goals, are included as part of the submission.

To prepare this benchmark report, we used SAS statistical software, version 9.4, to clean and score these indicator data for all medical organizations that submitted treatment cascade reviews for care provided in 2022. (Some of the largest organizations, such as Northwell Health, completed multiple submissions defined by their ability to deduplicate data across clinics, and each of these submissions is treated as an "organization" in the tables and benchmark calculations.) For those that had also reported previously on care provided in 2021, we used SAS to calculate the change in each indicator for the reporting organization at the organizational and clinical levels, as applicable (see tables below). We then exported these scored data to Excel, where we applied conditional formatting to highlight results in the top (green) and bottom (red) quartiles with at least 10 eligible patients. [These facility-identified results are not currently available as public reports; the data will be shared in a different format on the Health Data NY website.] We calculated statewide and regional benchmarks in Excel, using that program's PERCENTILE.INC formula for the values other than means and medians. These benchmarks are provided in three tables: organization level, clinic level, and clinic level within geographic regions defined by New York State Ryan White reporting (which, in New York City, correspond to that city's five boroughs). These tables include statistics specific to each indicator for the number of organizations or clinics with eligible patients, number of eligible patients among organizations or clinics that had at least one, indicator performance rates (reported as percentages) among those with eligible patients, and degree of change from 2021 to 2022 (expressed as percentage points).

Some indicator data were missing for a few different reasons. A few organizations did not provide any data for 2022, and these results are coded "NS" (no submission) on the organization-level report (no entries are included for them in the clinic-level report). Other organizations provided data for 2022 but not 2021, and this is coded as "PD" (partial data) for the degree-of-change columns. Some organizations provided data for one or both years but did not have any eligible patients for particular indicators; this is coded as "NEP" (no eligible patients). Finally, data provided for facilities within Health + Hospitals, the public health system in New York City, did not include sufficient information for scoring some indicators, and these instances are coded as "ND" (no data).

This report is not intended as a final ranking of performance as (i) random effects outside of provider control can have a significant impact on rates when caseloads are small and (ii) different organizations and even clinics within particular organizations face different challenges related both to client circumstances and institutional resources. Rather, the report is designed to provide general insights into individual and collective performance and identify areas for further improvement.

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Patient Status Categories			
Enrollment Status	Diagnosis Status		
	Newly Diagnosed by Reporting Organization	Newly Diagnosed Outside Reporting Organization	Previously Diagnosed (before Review Year) or Unknown Diagnosis Date
Active, new to organization	"Newly diagnosed active - linkage eligible"	"Newly diagnosed active - linkage ineligible"	"Other new to care"
Active, established in care	NOT ALLOWED		
Deceased, incarcerated, relocated outside New York State or receiving ongoing HIV care at another New York provider	"Linkage only"	"Excused – newly diagnosed"	"Excused – previously diagnosed"
HIV care status unknown	"Newly diagnosed of unknown status – linkage eligible"	"Newly diagnosed of unknown status – linkage ineligible"	"Open non-active"

Indicators		
Measure	Eligible Patients	Applicable Levels
Suppression on final viral load during the review year among established active patients	"Established active"	Clinic and organization
Suppression on final viral load during the review year among other new to care patients	"Other new to care"	Clinic and organization
Suppression on final viral load during the review year among all previously diagnosed active patients	"Established active" and "Other new to care"	Clinic and organization
Suppression on final viral load during the review year among "open" patients	"Established active" and "Open non-active"	Organization
Viral load suppression within 91 days of diagnosis among patients diagnosed during the review year	"Newly diagnosed active - linkage eligible", "newly diagnosed active - linkage ineligible", "Newly diagnosed of unknown status - linkage eligible" and "Newly diagnosed of unknown status - linkage ineligible"	Organization
Linkage to care (HIV-specific care visit or ARV prescription) within 3 days of diagnosis among newly diagnosed patients	"Newly diagnosed active - linkage eligible" and "Newly diagnosed of unknown status - linkage ineligible"	Organization
Resistance testing among active newly diagnosed patients	"Newly diagnosed active - linkage eligible" and "newly diagnosed active - linkage ineligible"	Organization

## Summary Statistics

New York State Organization-Level Caseload Statistics and Performance Benchmarks	Established Active Patients - Suppression on Final Viral Load	Previously Diagnosed but New to Care Patients - Suppression on Final Viral Load	All Previously Diagnosed Active Patients - Suppression on Final Viral Load	"Open Patients" - Suppression on Final Viral Load	Newly Diagnosed Patients (Dx. Internally) – 3-Day Linkage to Care	Newly Diagnosed Patients (Active Pts.) – Resistance Testing	Newly Diagnosed Patients – Viral Load Suppression (Within 91 Days of Dx.)
<b>2022 Participation and Caseloads</b>							
Organizations with Patient Data for 2021 and 2022	72	66	89	72	58	75	75
Organizations with Patient Data for 2022 Only	1	4	1	1	5	5	5
Organizations with No Eligible Patients in 2022	0	3	0	0	10	10	10
Organizations with No Data for Scoring This Indicator	17	17	0	17	17	0	0
Organizations Without an Approved Submission (2022)	6	6	6	6	6	6	6
Average Caseload	734	70	786	1044	11	14	15
10th Percentile Caseload*	52	6	61	65	2	2	2
25th Percentile Caseload*	127	14	152	157	3	5	5
Median Caseload	331	27	380	428	6	10	11
75th Percentile Caseload*	826	64	1024	1033	15	19	23
90th Percentile Caseload*	1490	235	1568	2124	23	33	33
<b>2022 Indicator Benchmarks</b>							
Average Rate	86.2%	74.6%	86.0%	75.3%	53.9%	68.9%	48.4%
10th Percentile Rate*	75.1%	56.0%	74.0%	49.8%	13.5%	21.7%	0.0%
25th Percentile Rate*	83.7%	66.7%	83.8%	64.6%	33.3%	50.0%	40.0%
Median Rate	89.2%	77.5%	88.5%	83.4%	53.3%	79.5%	50.0%
75th Percentile Rate*	92.4%	89.0%	91.9%	89.4%	80.0%	100.0%	64.0%
90th Percentile Rate*	94.4%	94.6%	93.0%	92.5%	90.7%	100.0%	75.3%
<b>Benchmarks for Percentage Point Change from 2021 to 2022</b>							
Average Change	2.5	4.6	2.4	2.5	-0.6	0.4	-0.2
10th Percentile for Change*	-3.3	-17.9	-2.5	-6.3	-40.2	-35.5	-32.9
25th Percentile for Change*	-0.9	-3.2	-0.9	-2.3	-16.3	-10.4	-14.3
Median Change	1.2	6.0	1.2	1.9	0.0	0.0	0.0
75th Percentile for Change*	4.0	14.3	4.4	4.9	22.0	8.7	13.4
90th Percentile for Change*	10.4	24.8	10.2	13.6	34.5	21.3	27.5

\*Calculated using percentile inclusive formula

**Summary Statistics - New York State**

<b>New York State Clinic-Level Caseload Statistics and Performance Benchmarks</b>	<b>Established Active Patients – Suppression on Final Viral Load</b>	<b>Previously Diagnosed but New to Care Patients – Suppression on Final Viral Load</b>	<b>All Previously Diagnosed Active Patients – Suppression on Final Viral Load</b>
	<b>2022 Participation and Caseloads</b>		
<b>Clinics with Patient Data for 2021 and 2022</b>	215	167	240
<b>Clinics with Patient Data for 2022 Only</b>	20	22	19
<b>Clinics with No Eligible Patients in 2022</b>	7	53	0
<b>Clinics with No Data for Scoring This Indicator</b>	17	17	0
<b>Average Caseload</b>	228	26	273
<b>10th Percentile Caseload*</b>	2	1	2
<b>25th Percentile Caseload*</b>	8	2	9
<b>Median Caseload</b>	50	7	66
<b>75th Percentile Caseload*</b>	198	25	259
<b>90th Percentile Caseload*</b>	611	70	834
	<b>2022 Indicator Benchmarks</b>		
<b>Average Rate</b>	77.4%	68.7%	76.7%
<b>10th Percentile Rate*</b>	45.1%	0.0%	44.4%
<b>25th Percentile Rate*</b>	74.5%	54.5%	73.3%
<b>Median Rate</b>	85.8%	76.5%	85.5%
<b>75th Percentile Rate*</b>	92.3%	91.5%	91.7%
<b>90th Percentile Rate*</b>	97.8%	100.0%	95.4%
	<b>Benchmarks for Percentage Point Change from 2021 to 2022</b>		
<b>Average Change</b>	0.7	2.4	0.9
<b>10th Percentile for Change*</b>	-15.7	-29.6	-11.2
<b>25th Percentile for Change*</b>	-2.8	-9.2	-2.2
<b>Median Change</b>	1.1	0.0	1.1
<b>75th Percentile for Change*</b>	6.0	15.6	5.6
<b>90th Percentile for Change*</b>	16.0	33.3	14.6

\*Calculated using percentile inclusive formula

**Summary Statistics - New York City by Region (Borough)**

<b>Clinic-Level Caseload Statistics and Performance Benchmarks for New York City Regions (Boroughs)</b>	<b>Established Active Patients – Suppression on Final Viral Load</b>	<b>Previously Diagnosed but New to Care Patients – Suppression on Final Viral Load</b>	<b>All Previously Diagnosed Active Patients – Suppression on Final Viral Load</b>
New York City - Number of Clinics with Patient Data for 2022	152	126	174
New York City - 25th Percentile Indicator Rate for 2022*	69.8%	50.0%	71.6%
New York City - Median Indicator Rate for 2022	84.0%	74.5%	83.4%
New York City - 75th Percentile Indicator Rate for 2022*	90.9%	89.8%	89.9%
Bronx - Clinics with Patient Data for 2022	54	43	60
Bronx - 25th Percentile Rate for 2022*	66.4%	47.3%	65.4%
Bronx - Median Rate for 2022	83.7%	60.0%	83.0%
Bronx - 75th Percentile Rate for 2022*	88.6%	84.5%	87.8%
Brooklyn - Clinics with Patient Data for 2022	34	28	41
Brooklyn - 25th Percentile Rate for 2022*	74.8%	63.0%	73.4%
Brooklyn - Median Rate for 2022	83.8%	73.5%	82.9%
Brooklyn - 75th Percentile Rate for 2022*	90.0%	89.7%	89.3%
Manhattan - Clinics with Patient Data for 2022	46	39	53
Manhattan - 25th Percentile Rate for 2022*	75.0%	60.0%	75.0%
Manhattan - Median Rate for 2022	87.6%	75.9%	86.0%
Manhattan - 75th Percentile Rate for 2022*	92.2%	86.4%	90.7%
Queens - Clinics with Patient Data for 2022	15	13	17
Queens - 25th Percentile Rate for 2022*	46.4%	42.9%	62.3%
Queens - Median Rate for 2022	82.5%	75.0%	83.0%
Queens - 75th Percentile Rate for 2022*	85.6%	100.0%	87.8%
Staten Island - Clinics with Patient Data for 2022	3	3	3
Staten Island - 25th Percentile Rate for 2022*	77.9%	64.6%	76.7%
Staten Island - Median Rate for 2022	91.9%	79.2%	92.0%
Staten Island - 75th Percentile Rate for 2022*	93.5%	89.6%	92.8%

\*Calculated using percentile inclusive formula

**Summary Statistics - Rest of State by Region**

<b>Clinic-Level Caseload Statistics and Performance Benchmarks for Regions Outside New York City</b>	<b>Established Active Patients – Suppression on Final Viral Load</b>	<b>Previously Diagnosed but New to Care Patients – Suppression on Final Viral Load</b>	<b>All Previously Diagnosed Active Patients – Suppression on Final Viral Load</b>
Rest of State - Number of Clinics with Patient Data for 2022	81	61	83
Rest of State - 25th Percentile Indicator Rate for 2022*	80.0%	66.7%	77.8%
Rest of State - Median Indicator Rate for 2022	90.0%	85.7%	88.9%
Rest of State - 75th Percentile Indicator Rate for 2022*	93.9%	100.0%	93.7%
Central NY - Clinics with Patient Data for 2022	9	7	9
Central NY - 25th Percentile Rate for 2022*	87.1%	61.9%	87.5%
Central NY - Median Rate for 2022	88.9%	81.8%	88.9%
Central NY - 75th Percentile Rate for 2022*	92.5%	90.5%	91.9%
Finger Lakes - Clinics with Patient Data for 2022	15	9	15
Finger Lakes - 25th Percentile Rate for 2022*	86.6%	73.3%	85.4%
Finger Lakes - Median Rate for 2022	92.1%	76.8%	91.0%
Finger Lakes - 75th Percentile Rate for 2022*	97.8%	96.0%	97.9%
Long Island - Clinics with Patient Data for 2022	15	15	15
Long Island - 25th Percentile Rate for 2022*	86.4%	76.8%	87.1%
Long Island - Median Rate for 2022	91.7%	89.5%	91.6%
Long Island - 75th Percentile Rate for 2022*	92.9%	100.0%	92.9%
Lower Hudson - Clinics with Patient Data for 2022	13	11	14
Lower Hudson - 25th Percentile Rate for 2022*	90.0%	66.7%	77.9%
Lower Hudson - Median Rate for 2022	93.7%	80.0%	92.3%
Lower Hudson - 75th Percentile Rate for 2022*	94.9%	100.0%	95.0%
Mid Hudson - Clinics with Patient Data for 2022	16	9	16
Mid Hudson - 25th Percentile Rate for 2022*	50.0%	0.0%	65.6%
Mid Hudson - Median Rate for 2022	80.0%	88.9%	75.7%
Mid Hudson - 75th Percentile Rate for 2022*	98.2%	90.9%	97.4%
Northeastern NY - Clinics with Patient Data for 2022	10	7	10
Northeastern NY - 25th Percentile Rate for 2022*	72.5%	72.2%	75.4%
Northeastern NY - Median Rate for 2022	85.4%	85.7%	84.3%
Northeastern NY - 75th Percentile Rate for 2022*	88.6%	96.9%	88.5%
Western NY - Clinics with Patient Data for 2022	3	3	4
Western NY - 25th Percentile Rate for 2022*	88.9%	74.0%	89.9%
Western NY - Median Rate for 2022	92.1%	81.4%	91.8%
Western NY - 75th Percentile Rate for 2022*	92.6%	90.7%	94.3%

\*Calculated using percentile inclusive formula