

Organizational HIV Treatment Cascade Review Guidance

Introduction

This guidance document provides organizations with the necessary tools and resources to submit their Organizational HIV Treatment Cascade Review. As part of the annual oversight activities of the AIDS Institute's HIV Quality of Care Program, organizations that provide medical care to people living with HIV (PLWH) in New York State (NYS) are expected to complete an Excel Template and submit it to the New York State Department of Health (NYSDOH) AIDS Institute via the Health Commerce System; submissions that pass validation checks will be incorporated into a secure AIDS Institute database. The Data Submission Excel Template includes a section to input patient-level data, a section visualizing cascade indicator results into charts and tables (these will be automatically generated from the provided patient level data), and a section for the organization's methodology, key findings, and quality improvement plan, which contains consumer involvement and updates on recent QI projects including stigma reduction activities.

Background

Organizational HIV Treatment Cascade

Ensuring that all PLWH receive high-quality medical care remains a top priority in combating the HIV/AIDS epidemic in the United States, yet achieving this goal remains a challenge. For providers to have an accurate understanding of the quality of care they are delivering to PLWH in their organizations, they must be able to collect, analyze, and visualize data on their performance. The HIV Treatment Cascade, when applied to a clinic population, allows providers to better identify gaps along the care continuum, starting from linkage and engagement in care to viral suppression. This represents a key strategy in our ongoing efforts to end the HIV epidemic in NYS. The Organizational HIV Treatment Cascade provides health care institutions with a standardized tool to:

1. Monitor the extent and quality of care being delivered to all PLWH seen at an organization, not only those who are actively engaged in their HIV program.
2. Identify gaps in the sequence of steps between diagnosis and viral suppression.
3. Use template tools to investigate these gaps and inform improvement activities tailored to meet the needs of the patient subgroups whose health data indicates challenges to their attaining desired outcomes.

4. In addition, organizational HIV treatment cascade data is integrated into New York State regional quality improvement collaboratives and quality learning networks to drive collective efforts and progress toward ending the epidemic.

2021 Organizational HIV Treatment Cascade Data Template Overview

The 2021 Organizational HIV Treatment Cascade Data Submission Excel Template consists of the following components:

1. A spreadsheet to input patient-level data (See Table 1). This will include;
 - Patient names, Zip Codes based on last known residences and demographic data (see Table 2).
 - Care continuum data (linkage to care for newly diagnosed patients, antiretroviral (ARV) prescription, viral load testing and viral suppression).
 - Data validation features to ensure the integrity of the inputted patient level data.
2. Automated cascade charts from inputted patient level data.
 - Newly diagnosed (if applicable)
 - Previously diagnosed
 - Open caseload
 - Established active caseload
 - Other new to care patients
3. Automated PivotTable report to allow drill-down table of active caseload by key characteristics and similar sub-analysis.
4. A data analysis worksheet for further investigation of outcomes among active patients.
5. Methodology section
 - A narrative of the methodology used to collect data
6. Key findings of the current review
 - Document the findings from analysis of the cascade data and include an update of the organization's 2020 cascade quality improvement work.
7. Quality improvement plan
 - A quality improvement plan for 2021 detailing how the organization intends to reduce the gaps in care identified by their cascades. Organizations will be able to select up to three quality improvement activities focusing on cascade indicators. Organizations will be asked to indicate whether these activities will be conducted at all their HIV clinics or specify the clinics that will participate.
 - Consumer Involvement
 - Develop a specific, measurable, time-bound improvement goal based on recommendations and meaningful involvement by consumers.
 - Explain how, by whom, and when these steps will be measured and assessed.

- Explain how consumers will be informed if goal recommended was successful.

All submissions will be reviewed by an AIDS Institute quality coach and data analyst. Approvals will involve a review of an organization's adherence to required submission components described in this document as well a satisfactory analysis of cascade data leading to a responsive quality improvement plan. Feedback will be provided to guide the integration of the cascades into organizations' ongoing quality management programs.

Table 1: Patient level data to be collected

Type of Patients	Patient level Data
All Patients	First name of patient
	Last name of patient
	Initial letter of patient's middle name
	Patient's date of birth
	Patient's sex at birth
	Patient's current gender
	Zip Code of patient's last known address
	Patient's ethnicity
	Hispanic subgroup if applicable (multiple entries are allowed, separated by comma(s))
	Patient's race (multiple entries are allowed, separated by comma(s))
	Asian subgroup if applicable (multiple entries are allowed, separated by comma(s))
	Patient's housing status on last assessment/report during the review period
	Patient's HIV exposure risk (multiple entries are allowed, separated by comma(s))
	Patient Zip Code of most recent residence
	Primary insurance on final status check during the review period
	Patient's enrollment status (active, deceased, incarcerated, relocated, receiving external HIV care, or unknown)
	Standardized abbreviation for the clinic within the organization where patient receives care (active patients only)
	Patient's diagnosis status (before or during the review period)
	Did the patient receive antiretroviral therapy (besides PrEP) during the review period?
	Did the patient receive a viral load test during the review period?
Previously Diagnosed	If the patient was diagnosed prior to the review period (or diagnosis date is not known) and tested during the review period, was the patient virally suppressed (< 200 copies/mL) on final VL during the review period?
Unknown Status	Service line or facility where patient last received care during the review period (inactive patients)
	If patient was seen on a service line other than those we have listed, specify where the patient was seen.

Newly Diagnosed	If the patient was diagnosed during the review period, what was the date of the patient's diagnosis?
	If the patient was newly diagnosed during the review period, was he/she seen for HIV care during the review period?
	If the patient was newly diagnosed and seen for HIV care, was a baseline resistance test performed?
	If the patient was newly diagnosed and seen for HIV care, what was the date when the patient was first seen for HIV care?
	If the patient was newly diagnosed and initiated on ARV medication, what was the date when ARVs (besides PrEP) were first prescribed?
	If the patient was diagnosed during the review period and tested during the review period, was the patient virally suppressed (< 200 copies/mL) on any test during the review period?
	If the patient was diagnosed during the review period and tested during the review period, what was the date of the first VL test?
	If the patient was diagnosed during the review period and suppressed during the review period, what was the date of the first suppressed VL (< 200 copies/mL)?

Table 2: Key characteristics for analysis of the active caseload

Characteristic	Categories (adapted from CDC, NYS Bureau of HIV/AIDS Epidemiology, and HUD)
Age	0-12; 13-19; 20-24; 25-29; 30-39; 40-49; 50-59; 60+; Unknown
Sex at Birth	Male; Female; Intersex; Unknown
Current Gender	Male; Female; Transgender Man; Transgender Woman; Other (Transgender other, non-binary, gender non-conforming); Unknown
Race	White; Black or African American; Asian; Native Hawaiian or Pacific Islander; American Indian or Alaska Native; Unknown
Ethnicity	Hispanic or Latina/Latino; Non-Hispanic, Latina/Latino; Unknown
Risk Category	Men who have Sex with Men (MSM); Intravenous Drug Users (IDU); Heterosexual contact; Hemophilia or coagulation disorder; Blood transfusion or Blood products; Perinatal transmission; Other; Unknown
Housing Status	Stable permanent housing; Temporary housing ¹ ; Unstable housing ² ; Unknown

¹ Defined as short-term arrangement with family or friends, transitional housing or temporary institutional placement including substance abuse treatment facilities and psychiatric hospitals.

² Defined as emergency shelters, jail/prison, places not meant for human habitation.

Visualizing Cascade Indicator Results and Charts

Indicator eligibility is dependent on care status. Please see the care status chart in the glossary for details.

Please note, however, that all HIV-positive individuals who were seen at the organization in 2020 should be included in the patient-level submission, including those who died during the review period or were incarcerated, relocated or confirmed to be receiving ongoing HIV care at another site as of the end of the review period.

The Cascade Data Template will automatically generate reports and cascades as follows:

1. **Newly Diagnosed Patients:** One cascade will automatically be generated for all patients diagnosed in 2020 who had at least one HIV ambulatory care visit with a medical provider who has the capacity to prescribe ARV medication at an organization.
 - **Linked-to-Care:** All patients diagnosed with HIV at the organization in 2020 who were linked to care within 3 days. A patient is considered to have been linked to medical care if the individual attended a routine HIV medical visit within three calendar days of diagnosis with HIV by a treating physician³ or if the patient is prescribed ALV medication following a positive diagnosis.
 - **ARV Therapy:** All newly diagnosed patients who were prescribed ART in 2020. Eligible patients include those enrolled in care (“active”) or of unknown care status as of the end of the review period.
 - **Baseline Resistance Testing:** All newly diagnosed patients with a record of a baseline resistance test within the review year.
 - **Viral Load Testing:** All newly diagnosed patients with a recorded viral load test within 91 days from diagnosis. Eligible patients include those enrolled in care (“active”) or of unknown care status as of the end of the review period.
 - **Viral Suppression:** All newly diagnosed with viral load <200 copies/mL within 91 days from diagnosis. Eligible patients include those enrolled in care (“active”) or of unknown care status as of the end of the review period.
2. **Other New-to-Care Patients:** One cascade will automatically be generated for all patients who were diagnosed prior to 2020 but were new to an organization’s HIV ambulatory care program, having had at least one visit with a medical provider who had the capacity to prescribe ARV medication in 2020 (or returning after not being seen or having a viral load test in the 2 prior calendar years).
 - **ARV Therapy:** All other new-to-care patients who were prescribed ART in 2020.

³ A routine HIV medical visit is defined as any medical visit with a clinician with ART prescribing privileges. PLWH are considered linked if they successfully attend this initial medical visit, irrespective of whether ART is initiated during that visit.

Eligible patients include those enrolled in care or lost to follow up as of the end of the review period.

- **Viral Load Testing:** All other new-to-care patients with a recorded viral load during the review period. Eligible patients include those enrolled in care or lost to follow up as of the end of the review period.
- **Viral Suppression:** All other new-to-care patients with a viral load <200 copies/mL at last VL test of 2020. Eligible patients include those enrolled in care or lost to follow up as of the end of the review period.

3. **Previously Diagnosed Patients:** Two cascades will automatically be generated for all other previously diagnosed patients.

- One for all open patients (established active and open non-active).
- One for all established active patients that is broken down by HIV care site, if there are multiple care sites.

3.1 **Open Caseload:** All previously diagnosed patients who received any services from the organization within 2020, except those who were new to care in 2020 (or returning after two or more years) or who were deceased, incarcerated, relocated outside NYS, or confirmed to be in care elsewhere by the end of the year.

- **ARV Therapy:** All open patients who were prescribed ART in 2020.
- **Viral Load Testing:** All open patients with a recorded viral load test in 2020.
- **Viral Suppression:** All open patients with a viral load <200 copies/mL at last VL test of 2020.

3.2 **Established Active Caseload:** All previously diagnosed patients who received HIV ambulatory care services from a medical provider with the capacity to prescribe ARV medications within the organization in 2020, except those new to care in 2020.

- **ARV Therapy:** All established active patients who were prescribed ART during 2020.
- **Viral Load Testing:** All established active patients with a documented viral load test in 2020.
- **Viral Suppression:** All established active patients with a viral load <200 copies/mL at last test of 2020.

4. **Automated Drill Down of Established Active Caseload by Key Characteristics:** This will help identify ongoing disparities in clinical outcomes among subpopulations of PLWH enrolled in an organization's HIV primary care program.

- We will automate calculation of the active caseload, prescription of ART, receipt of a viral load test, and viral suppression rate for each of these subgroups.

5. **Service Delivery Points for Non-Active Caseload:** To better target re-engagement interventions among PLWH without evidence of ongoing HIV care, organizations will be expected to report the **service delivery points** visited by open-caseload PLWH who did **not** receive HIV primary care services within the organization (and who were not receiving external HIV care, incarcerated, relocated or deceased as of the end of the review period). In other words, organizations will be expected to report the delivery points at which non-active open caseload patients received services.
- Report service delivery points for non-active patients.
 - We will automate calculation of how many non-active patients were seen at each delivery point.
 - Service delivery points include:
 - i. Emergency Department/Urgent Care
 - ii. Inpatient care, including ICU, surgery, and psychiatric care.
 - iii. Primary care (outside of HIV clinic(s))
 - iv. Faculty practice HIV care
 - v. Non-HIV specialty care such as cardiology, pulmonology, etc.
 - vi. Reproductive health services
 - vii. Mental and behavioral health services
 - viii. Dental services
 - ix. Supportive services
 - x. Other (please specify)

Reporting Methodology

For cascades to be understood by internal and external stakeholders, the methodology underlying their construction should be transparently reported. Organizations will therefore be expected to provide detailed answers to the following questions:

- ✓ What sources of data were used for the patient level data?
- ✓ How was service delivery point determined and verified for non-active open caseload patients?
- ✓ How were patients determined to be deceased, relocated outside NYS, incarcerated, or in care at an outside organization?
- ✓ How were date of diagnosis, first care date, first viral load date and first suppressed viral load date determined for the newly diagnosed patients?
- ✓ How were patients newly diagnosed internally distinguished from those externally diagnosed?
- ✓ What are the limitations specific to each data source?

Key Findings

This description should cite specific data from the cascades and explain how these indicate suboptimal outcomes in the context of internal, state, and/or national HIV treatment performance goals.

- ✓ A detailed description of significant gaps in care that are revealed during the review year, as well any disparities that emerge through disaggregation of outcomes by key characteristics.
- ✓ A narrative description of changes (if any) between the 2019 and 2020 cascade results.
- ✓ Include a description of quality improvement interventions that were tested throughout 2020.
- ✓ Explain if there were any barriers that were faced when implementing the quality improvement interventions. In addition, describe how the improvement plan was modified in response to changes.
- ✓ Were the stated goals achieved by the end of 2020?

Developing a Quality Improvement Plan

Organizations will be asked to submit an analysis and quality improvement plan that uses the identified significant gaps in the cascades to develop a formal strategy that addresses these gaps. This plan should feature **an analysis of significant gaps, as well as disparities that emerged through disaggregation of outcomes by key characteristics**. The results of the Organizational HIV Treatment Cascades should be incorporated into an organization's broader improvement activities regarding HIV treatment. At a minimum, each organization's improvement plan should include the following:

- ✓ At least one and up to three specific, measurable, and time-bound improvement goals that specifically address the gaps in established active, new to care or newly diagnosed cascade results with the indicators that your organization will focus upon. Numerical goals described as percentages should consider what the actual net improvement will be based on that percentage (e.g., a 5% goal for 20 patients only represents a difference of one patient).
- ✓ Each improvement goal should have a detailed description of proposed action steps (including how and by when these steps will be measured and assessed) and a roster of staff members responsible for implementation.
- ✓ A list of organization staff, including the HIV medical director, who will be responsible for execution of the proposed improvement plan. If applicable, organizations should also list any institutional or external partnerships that will be leveraged to implement the proposed improvement plan.
- ✓ A plan to disseminate the cascades to all relevant stakeholders (e.g., display of cascades in clinics for staff and patients to see, dissemination to organization leadership). Organizations will be strongly encouraged to include regional HIV quality conferences, meetings, and webinars (e.g., NYLINKS meetings) as potential forums for dissemination of their cascades and improvement plans.

Consumer Involvement

Each organization must provide an explanation of how consumers were engaged in the process of developing the quality improvement plan based on the data in the cascades.

- ✓ Explain how consumers were given the opportunity to learn about the methodology used to define each indicator and construct each bar on treatment cascades, including how the numerator and denominator were derived.

Submission Process Steps

1) Health Commerce System Registration

The cascade review will require the submission of patient-level data into a secure database through the Health Commerce System. To ensure a fully confidential process, organizations will need to identify appropriate staff to use the Health Commerce System (HCS) for data submission.

Registration Process:

- 1) Identify someone at the organization responsible for submitting the data. While only one upload is needed per organization, you may wish to identify a backup person as well.
- 2) Provide HCS access for these staff:
 - a) If your organization is already registered to use the Health Commerce System, contact the organization's HCS Coordinator to register additional staff as needed.
 - b) If the organization does not have a HCS Coordinator or you do not know if the organization has an HCS coordinator, contact Joe Kobilca at Joseph.Kobilca@health.ny.gov, and **provide your organization's name and the name and address of the clinic where you work.**

2) Completion of Data Template

See the Organizational Treatment Cascade Data Collection and Reporting Instructions.

3) Health Commerce System Submission

Submissions are due by Saturday, July 31, 2021. Submissions should be uploaded via the Organizational Treatment Cascade Data Upload application in the Health Commerce System site. **DO NOT EMAIL, MAIL OR FAX PATIENT LEVEL DATA.** In addition, **DO NOT USE OLD VERSIONS OF INTERNET EXPLORER (IE 10 or earlier) when accessing the upload application.** See the Organizational Treatment Cascade Data Collection and Reporting Instructions for additional details.

4) Ongoing Coaching

Program staff will provide one-on-one technical assistance to organizations with significant needs. **Beginning in May 2021, organizations will be requested, where circumstances permit, to provide their assigned quality coach with regular updates.** These updates should

include reports of progress on data collection in addition to ongoing QI activities to address gaps and disparities in cascade outcomes. Once the data are submitted, beginning in September, coaches will follow-up with organizations on a quarterly basis.

Glossary

Care Status Categories for Indicator Eligibility					
		Diagnosis			
		Internally diagnosed during the review period	Externally diagnosed during the review period	Diagnosed prior to the review period	Unknown
Enrollment	Active, new to clinic during review period, continuing in program)	"Newly diagnosed active - linkage eligible"	"Newly diagnosed active - linkage ineligible"	"Other new to care"	
	Active, seen prior to the review period, continuing in program)			"Established active"	
	Died during review period	"Linkage only"	"Excused - newly diagnosed"	"Excused - previously diagnosed"	
	Incarcerated as of end of review period				
	Relocated out of New York State during the review period				
	Confirmed to be receiving ongoing HIV care at another site as of end of the review period				
	Other status, not enrolled in care at your organization	"Newly diagnosed of unknown status - linkage eligible"	"Newly diagnosed of unknown status - linkage ineligible"	"Open non-active"	

Previously diagnosed patients: Patients diagnosed with HIV before the measurement year.

Open patients: Previously diagnosed patients who were not incarcerated at the end of the measurement year, deceased by the end of the measurement year, or confirmed to be in-care elsewhere at the end of the measurement year, and excluding those new to care in 2020 or returning after an absence of at least two years (no visits or viral loads).

Established Active Patients: Open patients who received medical services in the HIV program of the organization during the measurement year, excluding those new to care in 2020 or returning after an absence of at least two years (no visits or viral loads).

Newly diagnosed patients: Patients first diagnosed with HIV within the measurement year.

Linkage to care: A newly diagnosed patient is considered to have been linked to medical care if the individual, subsequent to initial diagnosis of HIV, either received an ARV prescription or attended a routine HIV medical visit within three calendar days of the diagnosis date.

Other new-to-care patients: Patients who were diagnosed prior to the review period but were new to an organization's HIV program, and patients who were seen prior to 2020, not seen (nor viral load reported) in 2018 or 2019, but then returned in 2020.

Non-active patients: Patients who (1) have had contact with a healthcare organization during the measurement year but were not seen by the HIV clinical program during that year and (2) who cannot be confirmed to have died by the end of the year, to be in care elsewhere by the end of the year, relocated outside NYS, or to be incarcerated at the end of the year.

Viral suppression: Previously diagnosed patients are considered virally suppressed when their last viral load test conducted in 2020 returned a value of less than 200 copies/mL. Newly diagnosed patient viral load suppression must occur within 91 days of diagnosis.

Organizational HIV Treatment Cascade Review FAQ

Review of Care Provided in 2020

Template & HCS:

1. Q: Will organizations be receiving a guidance document to accompany the Excel template?

A: Yes, a guidance document will be distributed to all providers (after it has been internally reviewed and approved). We will also distribute instructions specific to the use of the template and the process for submitting the data.

2. Q: How should the data be entered into the template?

A: Detailed instructions will be distributed with the template. Though the process may vary from site to site, we hope that most sites will be able to extract data from sources such as electronic medical records using data definitions and structure the information so that it can be copied and pasted into the template.

3. Q: Will it be possible to freeze the columns and rows on the template to better view the spreadsheet?

A: Where applicable, the spreadsheets in the template will have Excel's freeze-pane features enabled already; however, you will not be able to adjust these settings. Spreadsheets with line-item data will also allow for filtering so you can focus on subgroups of patients as needed, and the Patient Data Template worksheet now has a feature to hide the header rows so more data rows can be seen.

4. Q: Will the indicators be on a separate worksheet from the template?

A: A guidance document and data definition document, which describes the indicators, will be distributed; however, all reporting will be done using the template, which will also define the indicators in terms of the underlying data elements.

5. Q: Do organizations need their own Health Commerce System login to upload their Excel template?

A: Organizations will need to be registered for HCS use. However, if your organization is already registered you can see whoever manages that account at your site (your HCS Coordinator) to obtain access. Otherwise, you can write directly to Joe Kobilca, joseph.kobilca@health.ny.gov, **providing your name, the name of your organization, and the name and address of the clinic/office where you work.**

6. Q: Is the drill-down data automated on the template once the data is inputted?

A: Yes. For unknown-status patients, the service delivery site for each patient will need to be entered using a drop-down set of choices or another service category that you specify. Similarly, providers will need to enter patient characteristics that will be used for the analysis, particularly, of active patients. To drill down the data, the template user clicks a button, and the template automatically generates active-patient cascades based on the patient characteristics data and a table with the number of non-active patients seen per service line.

7. Q: Will organizations receive the template with their specific site IDs defined?

A: Yes. Each provider organization will have a pre-defined list of clinic names and corresponding abbreviations. The latter will be used to specify where “active” patients were enrolled in care within your organization.

8. Q: Can the data be uploaded to the Health Commerce System before an improvement plan is written?

A: No, organizations should analyze their data and develop a plan, which is submitted on the same template with the patient data and methodology statement. Coaches will review your plans and work with you to improve them if needed.

9. Q: Why does the Excel template start with inputting the first name of the patient?

A: Patient level information is required. This will help to track errors in the review process as well as identifying subgroups of patients on whom to focus your QI work. Also, the AIDS Institute would like the information to ensure that all patients are engaged in care.

10. Q: Can we copy and paste data into the Excel template?

A: Yes, so long as your organization has the capability to generate the applicable reports. This should be done “as values” if that option is available. If you do not use Excel, there are open source alternatives that can be used. Please contact Chris Wells via our group email account, gocreviews@health.ny.gov, for more information about this.

11. Q: Is there a specific application on the Health Commerce System for which you will need to register?

A: There will be a specific application on the HCS site for uploading your data (see Instructions for details), but you only need to register for general access to HCS. To do so, you will need to contact your local HCS Coordinator. If you do not have a Coordinator, you can contact Joe Kobilca at joseph.kobilca@health.ny.gov.

12. Q: Is there a particular spreadsheet that organizations will need to populate, or should they make their own spreadsheet using the format outline in the guidance document?

A: There is an Excel reporting template. In most cases, we recommend that you organize the data on another Excel spreadsheet first, and then copy and paste (“as values”) into the template. See the submission instructions for more detailed information about this.

13. Q: On the Statements tab of the template, we have different projects and goals at each of our networked HIV clinics. Where should I enter the clinic associated with the QI project listed?

A: Indicate in the QI plan whether each activity will be conducted at all your HIV clinics or specify which clinics will participate.

14. Q: I have never used PivotTables and would like to learn more about how to use them for QI. Are there resources and/or TA available for programs interested in using this function within the template?

A: Step-by-step directions on how to use the PivotTable feature will be included in the template instructions.

15. Q: I would like to know the VLS rate for all patients enrolled in HIV primary care at my organization. Is there a field within the control panel that calculates this? If not, how would I go about this?

A: Suppression rates for all previously diagnosed active patients will be included with other results on the Control Panel sheet. VLS on last viral load of the year is not collected for newly diagnosed patients. An organization would need to collect this data separately and include it in the VLS calculation for all patients.

16. Q: Can you please summarize the differences between the 2019 performance review elements and this year’s (2020) performance review?

A: We made no changes this year!

17. Q: What is meant by *newly diagnosed linkage ineligible*?

A: Patients who are diagnosed at an external organization are not eligible for the linkage indicator.

18. Q: We have more than a thousand PLWH receiving services at our organization. Do you have recommendations for simplifying the process of assigning enrollment status to these patients?

A: Keeping a patient list that you regularly update can help to minimize the amount of work for each review.

19. Q: The definition for ACTEST patient has been clarified (starting with the review of care provided in 2019), resulting in a modification from the previous year’s review – whereby the initial pull of data would include patients with at least one ambulatory care visit at

our clinic or at least one viral load test performed within or reported to our organization during the two years immediately prior to the review period. This requires a slight modification in how we pull our caseload (denominator) – that will potentially result in an inability of comparing longitudinal data: What do you recommend in terms of assuring consistency from year-to-year?

A: As indicators are changed, revised or clarified, which inevitably will occur for a variety of reasons, including guideline changes, clearly detailing methodology for collecting data in each period will help to understand relative consistency of the data over time. Including these changes in any data report will be useful for understanding the limitations of the data.

20. Q: I scored the indicators, and it seemed like some of the numerators and denominators were off. We realized that some of the patients with “OTH” in the enrollment column should actually be marked as active patients, and we want to change this where applicable. Which table should I look at to see just our ‘active’ people?

A: If you use the “Generate Scored Patient Data” command on the Control Panel, you will have patient-level results that you can filter by various categories, including enrollment status. Use the auto-filter drop-down lists on that worksheet to do that. You can then match the (de-identified) patients on that sheet with those in the Patient Data Template sheet as the patients are listed in the same order.

21. Q: I am pasting the patient level data unto the QOC template. However, the instruction booklet stated that the information should be pasted using the “Values & Number Formatting (A)” option. Can you let me know where I can find this on the template?

A: We now recommend copying and pasting as “Values (V)”. After copying the text, you can go to the Home tab in the template file, and there should be a clipboard icon in the top left corner. Below that, there’s a very small triangle. If you click on that, you get a menu of different options. Hover your cursor over them to see the one for pasting values.

Documenting and Categorizing Patients

1. Q: When developing our QI plan, should we be focusing only on the patients we care for or everyone?

A: You should review the results for all patient groups to identify any gaps in care. This may include variations in care outcomes among your newly diagnosed, active new and established patients and/or limited documentation of patient outcomes among non-active patients (including deceased, incarcerated, relocated, in external care, or ‘other’ status).

2. Q: What categories do patients fall into who had a preliminary point of care positive test, then got lost to follow up and were eventually confirmed in 2021?

A: Exclude this patient from the review (i.e., do not enter on spreadsheet) as they were not known to be HIV positive before the end of the review period.

3. Q: Is it only medical visits or does any visit at all in the building count? Like social work, therapy, etc.

A: Any HIV+ patient who was seen for a visit to support their medical care should be included. Thus, patients seen just for social work visits should be included as this was in support of their mental and, perhaps, physical health.

4. Q: What about telemedicine visits? Do they count?

A: Yes, throughout the review process you can treat a telemedicine visit as equivalent to an in-person visit with the same provider. This applies to determination as to whether a patient was seen at all in 2020 (and belongs on the spreadsheet) and whether they were seen for management of HIV disease, which in turn defines whether someone is an “active” patient and, for newly diagnosed patients, when they were linked to care. Similarly, if a visit specific to HIV care occurs outside of the HIV clinic (e.g., at an inpatient bed), that can also be used as the date of first HIV care for a newly diagnosed patient (even if not “ambulatory”).

5. Q: Is 3-day linkage only for newly diagnosed or new to clinic patients?

A: The linkage indicator only applies to patients newly diagnosed internally, either as inpatients or ambulatory patients. However, the date of first HIV care should also be reported for patients externally diagnosed during the review period as we also analyze VL suppression with this date in mind. ART prescription after diagnosis is also an acceptable linkage to care indication. Whichever comes first, the linkage to HIV care or ART prescription after HIV diagnosis, will be used for the linkage indicator. No linkage information is necessary for previously diagnosed patients even if they were new to the clinic in 2020.

6. Q: Aren't the numerators in the indicator scoring referring to active patients on ARV?

A: As in previous cascade reviews, there are multiple sets of indicators for the different patient populations. Some apply just to the established active patients, but others look at outcomes for the broader “open patient” population, and we also analyze results among those newly diagnosed or new-to-care at your organization.

7. Q: I don't have documentation of a diagnosis date for HIV+ patients coming in for surgery, etc. What should I enter for newly diagnosed patients when I don't have the date?

A: If you have information that allows you approximate the date, please do so. For instance, “HIV diagnosis in March” could be translated to a diagnosis date of 3/15/20. However, if you have no documentation besides a generalized note that the patient was

diagnosed, you cannot be sure that they really were diagnosed during the review period. In this case, change the diagnosis status to 'UK.'

8. Q: If I put 'UK' for Ethnicity or Race, do I put 'UK' or 'NA' for the Hispanic and Asian subgroup fields?

A: Put 'NA' for the applicable patient subgroup if you don't know for sure if they are Hispanic or Asian.

9. Q: A patient was diagnosed externally but we had to run the antibody test here to confirm. Are they still considered externally diagnosed?

A: Yes. We are looking for the time and location where a physician first diagnosed the patient as being HIV+.

10. Q: We might not have up to date VL test results for patients who are not ours.

A: If you have information for the current review period, please enter it. However, it's fine to enter 'UK' if you don't have current testing results.

11. Q: One patient did not follow up with an HIV medical visit until Jan. 2021. (Unable to enter that date on template without having an error.)

A: If the patient wasn't seen until 2021, then they weren't linked in 2020. That's OK; we must draw the line somewhere. The expectation is not necessarily to see 100% "scores" but to collect the data in a consistent way that allows for quality improvement activities. When you analyze the results, you can examine reasons why patients may not have been linked within the specified timeframe.

12. Q: I do not understand the formula for "VL testing for newly dx." A person newly dx in 2020 and new to care at my clinic may have a VL test completed more than 91 days after diagnosis. Shouldn't the countdown for externally diagnosed patients be based on *hiv care date* and *first vl date newly dx* instead?

A: We discussed this internally as we were developing the template and decided to stick with a definition that matched the Ending the Epidemic indicator for newly diagnosed patients regardless of site of diagnosis. So, we're scoring this as suppression within 91 days of the diagnosis date. We understand that it may be difficult or impossible to achieve suppression within this timeframe if someone is delayed in presenting to your clinic. We, therefore, also use the HIV care date and ART initiation date to calculate alternative measures (see the Indicator Definitions spreadsheet in the template). As usual with our QI reviews, the aim is not necessarily 100% scores but an understanding of where there is (or is not) room for improvement.

13. Q: Please confirm if the Clinic Code field should be blank if the enrollment status for a patient is either EXTCARE or OTH?

A: Yes, the Clinic Code field should be left blank in the circumstances you mention. It's only for patients enrolled in HIV care in your organization as of the end of 2020 (whether newly or previously diagnosed).

14. Q: For patients who identify as Hispanic/Latino for their ethnicity, which option should we be selecting for Race? Many of our Hispanic patients don't identify as White, African American, or any of the other Race options. There is no "other race" option which is what most of our Hispanic patients have chosen. I'm not sure that unknown would be the correct option either.

A: This depends on the information you have in your records for each patient. If you have separate information about race, please enter that. Otherwise, enter 'UK' for unknown race. This will be flagged as a warning, but that's OK. We'll still have the information that they're Hispanic, which is what we used to capture when we combined race and ethnicity. In general, these options are a result of aligning with HRSA categories to streamline the review process as best as possible for providers.

15. Q: The Control Panel is reporting errors because I left these fields blank for established patients:

- Diagnosis date
- Hiv care date
- Arv initiation date
- First vl date newly dx
- First suppressed date newly dx

Should we be entering NA for these instead? The instructions say to leave them blank for all but newly diagnosed patients.

A: It is appropriate to leave these date fields blank for patients who were diagnosed prior to the review period. Please check that you have correct values for *Diagnosis* ("PREV") and *Enrollment* ("ACTEST").

16. Q: For patients who are only seen for a health homes visit (i.e., no medical care at all) – should we include them in our extract?

A: Our "rule of thumb" is that all HIV+ patients who were seen for any service related to their physical or mental health should be included in the review. This would typically include patients seen in a health-home setting but might exclude, for instance, patients seen only for transportation services. All active patients must have had at least one HIV clinical visit in the review year. All established active patients must have had a minimum of one HIV clinical visit or one viral load test in the 24-month period preceding the review year.

17. Q: As I am going through the open caseload, we have a lot of patients who see an HIV provider in the community, and I had been marking them "EXTCARE" for Enrollment; however, I believe the intent of EXTCARE is actually more like the old "transfer of care"

from HIVQual, right? E XTCARE would be someone who was seen at our HIV clinic but then was confirmed to have transferred to another provider outside the organization?

A: The intention is along the lines of “transfer.” However, it’s possible that someone might get HIV services elsewhere but continue to be seen for other medical care at the organization under review. The standard we’ve used for “EXTCARE” is “confirmed ongoing HIV care at another provider where the name of that provider is documented.” So, depending on what you mean by “see an HIV provider in the community,” this could apply, or they could be unknown status (Enrollment = “OTH”) patients (i.e., meaning it is unknown if their external care is ongoing).

Newly Diagnosed/ New-to-Care Cascade

1. Q: Is a patient considered newly diagnosed if they were previously diagnosed but are new to living within the US?

A: No, they might be considered new to care if they started care at the site during the review year. The patient is considered newly diagnosed if the original date of diagnosis was during the review period (2020).

2. Q: For patients who are new to an organization in 2020 but diagnosed in a different year considered previously diagnosed?

A: These patients have their own category, Other New to Care, which is distinguished by the combination of responses in the *diagnosis* and *enrollment* fields. They are not included in calculations for the open or established active patient cascades.

3. Q: For the diagnosis date for newly diagnosed patient, should you use the date on which the results of the confirmatory test were provided to the patient?

A: If that is the policy of your site. Our formal definition is the earliest available date when any of these events occurred:

- (i) HIV-1 and/or HIV-2 antibodies detected on antibody differentiation immunoassay (date of report).
- (ii) Acute HIV-1 infection detected on HIV-1 NAT (date of report).
- (iii) Second positive rapid HIV test (different manufacturer than for first test) conducted.
- (iv) Date when treating physician entered a diagnosis of HIV disease or initiated ARV therapy on a presumptive diagnosis of HIV disease.

4. Q: For the newly diagnosed data, should we include both individuals diagnosed internally and externally in 2020 and exclude those individuals diagnosed in a previous year but new to us in 2020?

A: All HIV+ patients should be included in the template. You will use the *diagnosis* field to distinguish those who were newly diagnosed in 2020. Newly diagnosed patients are defined as any patient diagnosed for the first time in 2020 (whether at your organization or elsewhere). All patients internally diagnosed will be included in the 3-day linkage measure. All newly diagnosed patients will be included in the on ART, VL testing and VLS measures unless they are linked to an external clinic (or were deceased, relocated, receiving ongoing external HIV care, or incarcerated as of the end of the review period). New-to-care patients are defined as those patients who were diagnosed prior to 2020 but were seen for the first time at your site in 2020 (or re-entered care in 2020 after two or more years absence without reported VL). These patients will be distinguished through an entry of ACTNEW in the *enrollment* field.

5. Q: If a patient is returning to an organization after 2 years but was established in care with another HIV provider, is the patient considered new-to-care?

A: Yes. So, if the patient was seen prior to 2018, not seen in 2018 and 2019 (nor reported VL in those years), but then returned in 2020, they would be considered new to care.

6. Q: If a primary care physician who is going to follow up with a patient makes an appointment for a week and the confirmatory test results are returned on day 3 and the patient shows up on day 7, what type of linkage is this considered? Is the patient linked from day 1 or is this now a post day 7 linkage? And, what if the confirmatory test is returned on a Saturday, and the patient is not seen until, for instance, Tuesday?

A: Days to linkage will be measured using date arithmetic so it will be the day from diagnosis to linkage to care without exception. However, ARV prescription is now an acceptable measure of linkage to care. Therefore, if a patient receives ARV prescription before attending an HIV clinical visit, the date they receive the ARV prescription is considered the linkage date. If a patient attends an HIV clinic visit before being prescribed ARV, the date of the visit is considered the linkage date. The date of diagnosis is defined as per answers to other questions in this document. Linkage is defined as the date of the patient's first visit for HIV care or ARV prescription on or following the date of diagnosis. Linkage will also be measured in other intervals (7 days, 30 days, 90 days).

7. Q: For patients who were diagnosed or new to care near the end of the reporting year (2020), should providers pull their viral load recorded in 2021?

A: No, all data must be from 2020. We understand that this may result in some patients not meeting indicator criteria.

Service Line

1. Q: What should be written in the Service Line specifics?

A: In the *service_line* field, there is a drop-down list to select the service line(s) where the patient was seen and an “other” choice if an applicable option is not available in the drop-down list. The specification of this other service should be made in the *other_service_specify* field, and this should be a brief description (up to 200 characters) of the nature of that service. If a patient was seen multiple times on a service, only one entry for that service is required.

2. Q: How do patients from the agency (e.g., HIV + housing program) but not from the clinic fit into the service line questions?

A: PLWH who are not established HIV clinic patients are considered open inactive patients. There is a dropdown list, associated with *service_line* field, to select the where these patients accessed services from your organization. The goal is to understand where patients who are not in care are touching the system so that you can strengthen efforts in those areas to engage patients into care. Depending on the nature of your housing program, this could be classified as supportive services (“SS” code) or other (“OTH” code), with “housing services” and any relevant details specified.

3. Q: Under Service Lines, what is meant by “supportive services”?

A: Supportive services are non-medical services meant to provide support for patients; case management, nutrition and transportation are examples of supportive services.

4. Q: Do Service Lines apply to the open and active caseload?

A: This field will apply to certain open patients but not active patients. Service line information is only needed for patients who are not enrolled in HIV care at your organization and not known to be in care elsewhere, deceased, incarcerated or relocated by the end of the review period (i.e., for unknown-status patients). Care elsewhere entails documentation in your EMR of the HIV care provider (person’s name or name of organization), and relocation entails documentation in your EMR of the location (state outside of New York or foreign country) where the patient moved.

5. Q: Under Service Lines, is “PC (primary care outside of your HIV clinic(s))” and “FACHIV (faculty practice HIV care outside HIV clinic(s))” the same thing as HIV care being external?

A: If the patient is known to be receiving ongoing external care (i.e., the documented name of individual provider or providing organization is known), that is specified in the *enrollment* field as “EXTCARE.” Entry of service line data is only for the “open non-active” patients (see previous question).

6. Q: For clients who are HIV+ who participate in programs such as psychotherapy, adult day health care and OASAS, but are not seen for primary care at the organization, are they to be included in the total number of patients seen in 2020? If so, are they classified as “EXTCARE” (external care) or “OTH” (other) and then marked as “MBHS” (mental and behavioral health services) or “SS” (supportive services) or “OTH” (other) in the Service Line variable?

A: These patients should be included in the review. Patients who are receiving ongoing HIV primary care externally would be classified as “EXTCARE” for *enrollment*. Otherwise, they would be classified as “OTH” (unknown care status) for *enrollment*, and the *service_line* entry would depend on the nature of the care that was provided.

7. Q: For a service that could go under either “MBHS” (mental and behavioral health services) or “SS” (supportive services), should the provider determine the best fit for said service? For example, is an Opiate Treatment Program (OTP) considered “OTH (other)” or “MHBS (outpatient mental and behavioral health services)”?

A: Yes, use your best judgment in these cases. If more than one service was provided, each should be included, classifying them to the best of your ability or entering “OTH” for *service_line* and providing details in *other_service_specify*. If needed, it’s possible to combine a predefined service category such as “MBHS” with “OTH” in the *service_line* field. For this example, it depends on the nature of your OTP and who is providing the services. It may be appropriate to classify this as a mental and behavioral health service, but you can use “OTH (other)” to specify alternatives if indicated.

Viral Load Suppression

1. Q: For newly diagnosed patients, does the 91 days start after you have received lab confirmation?

A: It is 91 days from the date when the patient was diagnosed as previously defined.

2. Q: What should you do if the patient does not have a VL test in 91 days?

A: These patients will be treated as not virally suppressed within 91 days.

3. Q: Are only patients with a VL test in 91 days included in the denominator for viral suppression?

A: No, all newly diagnosed patients are in the denominator. If there is no viral load result, they are considered not virally suppressed.

Technical Problems

1. Q: I’m trying to enter patient MRN numbers into the Excel sheet, but it keeps translating them to hashtags. The number has plenty of room to fit so I’m not sure what the error is.

A: Please make sure that the cells you are pasting into are currently formatted as text (not general or number). Then when you copy and paste as values it should be OK. If you continue to have problems, you may want to paste everything (as values) into a clean copy of the file.

2. Q: I am having an issue with the Excel template. I am copying the names from my Excel sheets into the secured template. I have entered other names before, but now I am getting an error message, stating that this is a secure document and I need a password to enter the information on the sheet. However, I have opened the sheet with the given password, but now it is not allowing me to paste.

A: This could be because the number of columns you are trying to paste exceeds the non-protected space in the worksheet or you are entering data below the rows reserved for data entry (16 through 20015). The former can happen if you copy additional columns or start the paste in the wrong column; the latter can occur if you have filtered the data in a way that removes blanks.

3. Q: I'm having problems manipulating the data inside the Excel file.

A: Many of the cells in the template are protected to prevent changes that could jeopardize the integrity of the data. This includes individual cells as well as entire rows and columns that cannot be edited or deleted. If you have many changes to make, you may be better served by copying everything into a separate file, making the edits there, and then pasting the resulting content (as values) into another blank copy of the template.

4. Q: I'm getting an error message when I try to clear errors with a filter in place.

A: The performance of any of the VBA programs that you run from the Control Panel can be affected if the patient-level data are in a filtered state. Please make sure to remove all filters (i.e., reselect "All" as needed) before checking for errors or scoring the data. You can reapply the filters afterwards as needed to make corrections. You can also filter the results in the Scored Data sheet to review the results.

5. Q: When I complete the Statements section, information entered, although less than the required 8000 characters, does not show completely. Should I be doing something else?

A: What you are doing is fine. Even if it does not show completely in the blue text box, all the text will appear line by line in the thin white text box above the worksheet if you click on it and scroll through it. You can do this to double check that all the text in a cell is intact. If the formatting of the cell has changed, you can also right click on the blue cell where you've entered data, select Format Cells and then the Alignment tab, check the Wrap Text box and click on OK.

6. Q: We are wondering why the linkage chart did not populate. Granted, there were only 3 newly diagnosed patients in 2020, and 1 of these was diagnosed externally.

A: This indicator only applies to patients internally diagnosed during the review period, and it's possible there may be problems with the data entered for these patients. For this and all questions regarding scoring, please check the Indicator Definitions spreadsheet to make sure that the patients are truly eligible for the indicator/measure under consideration. You can also check the Field Descriptions & Validation sheet to check for any related data entry errors.

7. Q: I copied some of my data in my cascade and it is now locked, and I can't take it out.

A: It's possible you may be entering the wrong password. Please double check, including making sure you do not have Caps Lock engaged. If you cannot remember the password, please contact us at gocreviews@health.ny.gov.

8. Q: I am experiencing some difficulty with validating a few errors in my data.

A: Please see the Field Descriptions & Validation spreadsheet (far right tab at the bottom of the template) for a list of reasons why these and other fields could be marked as errors.

9. Q: I am not able to use the template on my computer at work. I sent the template to the IT department and a copy was made of the template and I was able to add some of the patient names onto the template. However, when I tried to check for errors in the control panel, I am receiving this error notice: "cannot run the macro copy of QOC cascade template."

A: Macros need to be enabled for the commands on the Control Panel to work. If you are cannot obtain permission from your IT staff to do that, please contact us at gocreviews@health.ny.gov, and we can arrange for secure transfer of the file to review the data for you.

10. When I try to 'check patient data for errors' and 'score indicators,' I received a pop-up message stating: "Something went wrong. Please note what you just did and take a screen shot. If the problem persists after you close and reopen the file, please seek technical assistance as needed at gocreviews@health.ny.gov. Remember, do not email patient-identifying information!"

A: This is a generic error message that's produced when one of the Excel VBA programs runs into unexpected data. It could be due to a problem with the data entry, the version of Excel being used or a bug, or some combination of the above. Please contact our data analyst via the email account mentioned here, and we will arrange to review the particulars of the problem with you.

Miscellaneous

1. Q: How do you find out who your organization's coach is?

A: If you are a member of NYLinks, you're NYLinks lead is your coach. If you don't know who your NYLinks lead is, please contact gocreviews@health.ny.gov. See the appendix at the end of this document for a list of these coaches.

2. Q: For patients who describe their race as "Other", which is an option in some EHRs, should they be reported as "Unknown"?

A: If no other information is available, yes. The code for this in the *race* field is "UK."

3. Q: Would an MCO plan be considered as "other plan"?

A: The intention is to capture information about who is paying for coverage. So, for instance, Medicaid Managed Care would be coded as "MEDICAID." Other managed care would likely be "PRIVATE." If nothing fits, classification as Other Plan ("OP" code in *insurance* field) is acceptable.

4. Q: Is there a definition as to what is classified as "Temporary" housing or is it what you choose to put in that category based on the data we collect in that area?

A: This is defined as a short-term arrangement with family or friends, transitional housing or temporary institutional placement including substance abuse treatment facilities and psychiatric hospitals. If you do not have structured data that match this definition, make the assessment to the best of your ability with whatever housing status data you can obtain.

5. Q: Is the HIV Organizational Treatment Cascade Review the same as HIVQUAL, or is it something different?

A: The organizational treatment cascade review replaces HIVQUAL, which is no longer a component of the annual quality review.

6. Q: What is done for patients who are homeless for part of the year—do you choose the last status of the year?

A: Yes, but use your best judgement. If, for instance, a patient was homeless for most of the review period and got housing the last week of December, consider what status best describes the patient.

7. Q: What clinic code should be used for a patient that has been seen at multiple clinics throughout the year?

A: The clinic where the patient was seen most often (or last clinic where the patient was seen if a tie).

8. Q: For a patient (for example, someone receiving methadone) who received HIV care at one point in 2020 but by the end of the calendar year was receiving HIV care outside of

the organization, which indicators would apply? Does it matter if the patient was newly diagnosed in 2020?

A: Patients who were in care elsewhere as of the end of the review period will be excluded from the calculations for all formal indicators with one exception: for those who were diagnosed internally in 2020, the linkage indicator will apply. However, entry of some response for the on-ARV indicator and the applicable VL testing and VLS fields is required for all patients; a response of “UK (unknown)” is acceptable where needed.

9. Q: In describing our QI projects, how should we refer to retrospective reviews?

A: It’s usually easiest to refer to the time when care was provided. So, reviews that are conducted in 2021 with 2020 data are most often referred to as the ‘2020 cascades.’ To be more explicit, the review can also be referred to as ‘the 2021 cascade review of care provided in 2020.’

10. Q: I’ve seen that you’ve distributed a new version of the template. Currently, I am working on the data entry, using a previous version of the template. Can they be merged without the loss of already entered data?

A: Yes, you can easily transition at any point from the file you’ve been using to a new template. With both files open, select all the cells with data from the Patient Data Template sheet in the original template. On the Home menu for that file, select Copy. Then, in the new file, select the first data entry cell (C16, assuming you have data beginning with first names). On the Home menu for that file, click on the drop-down arrow below the Paste icon and select the “Paste as Values (V)” option.

Appendix: Regional QI Coaches

Bronx: Dan Belanger, daniel.belanger@health.ny.gov

Brooklyn: Steve Sawicki, steven.sawicki@health.ny.gov

Central NY & Southern Tier: Laura O'Shea, laura.oshea@health.ny.gov

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Manhattan: Susan Weigl, sweigl@yahoo.com

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