NEW YORK STATE | Department of Health | AIDS Institute

2025 Review of 2024 Care

ATTENTION
The official deadline for submission is July 18, 2025. Processing of submissions will begin on June 16, 2025.

2025 Organizational HIV Treatment Cascade Review of Care Provided in 2024

PROGRAM OVERVIEW AND INSTRUCTIONS FOR REPORTING VIA THE HEALTH COMMERCE SYSTEM

NYS DOH QUALITY OF CARE PROGRAM

Contents

Overview and General Guidance

Background of the Organizational HIV Treatment Cascade

Ensuring that all people with HIV 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 deliver to people with HIV 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, from linkage and engagement in care to viral suppression. This represents a key strategy in our ongoing efforts to end the HIV epidemic in New York State. 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 people with HIV seen at an organization, and not just those who are actively engaged in their HIV program.
2. Identify gaps in the sequence of steps between diagnosis and viral suppression.
3. Develop data-driven plans to assess and improve gaps within an organization's care continuum through quality improvement (QI) activities.
4. In addition, organizational HIV treatment cascade data is integrated into New York State regional quality improvement collaboratives and quality learning networks to drive our collective efforts and progress toward ending the epidemic.

This reporting system was created with the needs of healthcare providers in mind, providing expedited feedback related to the care of all people with HIV who touch the organization. A Microsoft Excel submission template automates data validation and analysis, allowing providers to view gaps in care with a few clicks. (Users who do not have access to Excel can use free, opensource alternative spreadsheet programs to enter and submit the data. Some other functions may not be available.) Through the secure collection of patient-level data, results are compiled individually for each organization as well as across the State. The required data fields are aligned with those mandated by Ryan White Services Report (RSR) and offer analytical insights into demographic factors that are associated with viral load suppression.

New York State organizations that provide medical care to people with HIV are expected to complete this template and submit it to the New York State Department of Health AIDS Institute via the Health Commerce System; submissions that pass validation checks will be incorporated into a secure AIDS Institute database.

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.

Data Use Policies

Validated submissions are stored on a secure server within the AIDS Institute. To review submissions and provide advice regarding ongoing quality improvement work, our Quality of Care Coaches use a dedicated intranet application to view aggregated results and the statements about methodology, key findings, quality improvement projects and consumer involvement as well as a list of quality tools used by the submitting organization. Quality of Care Program data management staff and affiliated data systems developers have secure access as well to the patient-level data. This allows for ongoing web application development and close review of submissions for any data integrity concerns.

Organization- and clinic-level results are available for each participating organization within their data template. To put these results into context for the participants and identify statewide trends, the Quality of Care Program scores and analyzes the data collected from all providers. The Program then develops quality improvement profiles specific to each participating organization and annual benchmark and quality improvement activity reports. With the permission of the submitting organization, we post profiles for organizations with exemplary quality improvement work on the New York State Ending the Epidemic Dashboard. After Executive Deputy Commissioner clearance but without additional provider approval, we also post key indicator results, with facility identifiers, on the Health Data NY website.

To advance the public health objectives of the AIDS Institute, the Program occasionally uses the aggregated data for research studies. Recent work has included a regression analysis of the patient- and facility-level factors associated with immediate initiation of antiretroviral medication. Other planned research includes review of outcomes specific to more elderly patients. Some of this work may involve matching of these data with other identified data collected by the AIDS Institute to inform collaborative studies. These projects typically do not involve attribution of particular participating organizations, and we will review research results with any named organizations before submitting anything for publication.

Finally, within the constraints of specific data use agreements and without provision of any patient identifying information, we may share data reports and summaries with the New York City Department of Health and Mental Hygiene and other public health agencies.

The Reporting System for Review of Care Provided in 2024

Data Template

Prior to 2019, organizations were asked to collect and validate their data to create organizational treatment cascades manually: one for newly diagnosed/new-to-care patients and two for previously diagnosed patients. Guidance was provided through a document and coaching, but data validation, cascade design, and construction were carried out by the organizations using their own resources.

This year, the New York State Department of Health HIV Quality of Care Program is continuing use of the **Excel submission template** created in 2019 (for review of care provided in 2018) where the following tasks are performed in one place (asterisks designate automated features):

1) patient-level data collection
2) data sorting*
3) data validation*
4) scoring of cascade indicators*
5) generation of charts depicting scored cascade indicators*
6) scoring of patient-level data*

7) generation of a patient-level scored data report*
8) generation of a pivot-table report*
9) generation of analytical data for chi-square tests and logistic regression analyses*

The template will also store the following written statements:

10) field-specific responses to data validation warnings
11) methodology
12) key findings
13) planned quality improvement (QI) projects
14) updates on previous quality improvement (QI) projects
15) consumer involvement

All healthcare organizations participating in this review are asked to appoint a person responsible for submitting the template on their organization's behalf. When all elements of the template are filled out and completed, the template must then be uploaded via the **Health Commerce System**, a secure file-sharing platform, for final processing and storage on a secure DOH data server. The organization's Coach should be notified via a direct email (i.e., outside of the Health Commerce System, and *without any attachments*) when templates are submitted.

New for This Year's Review

The most significant change this year is the addition of a new indicator: frailty screening among older patients. While the inclusion of data for this indicator is optional for this review, we plan to require this next year and encourage all organizations to participate now in this important look at care for an aging population. The election to participate in this part of the review is made on the Preliminary Information worksheet in the cascade data template. If you say YES (the default value), these data should be entered into a new column on the right of the Patient Data Template worksheet. Validation and scoring of these data only occur if the YES selection is made. The scores, if any, appear on the Control Panel sheet along with the other indicators.

Eligibility for this indicator is restricted to patients enrolled in care. For those established in care, it applies to patients who were at least 51 years of age by the end of the review period (12/31/2024). For newly diagnosed or other new to care patients, it applies to those who were at least 61 years old by this date. These cutoffs are based on HIV primary care guidelines for annual and new-patient screening, respectively.

We will score these data two ways: percentage of eligible patients receiving at least one recommended screening during the year, and percentage of eligible patients receiving any screening during the year. The recommended screens, based on validation studies, are these (please see Appendix 2 for additional details):

- "FRAIL" Questionnaire
- Gérontopôle Frailty Screening Tool
- Dalhousie Clinical Frailty Scale
- Frailty Index (Accumulation of Deficits)

Even if you used other screening tools, we would highly appreciate your participation in this pilot! Of note, if you enter these data in the template, in addition to the overall scoring the results can be analyzed on the PivotTable sheet or the Data Analysis sheet.

Other changes of note include:

- We have a newly named application in the Health Commerce System website for submission of your data to us (see the Submission of the Template section of this document for additional information).
- Updated charts
    - Separation of active and non-active open patients on first chart
    - Separation of established-patient results into a series of charts specific to a single demographic factor
    - Updates to color and font choices for consistency and legibility
- Four additional options for Language: BURMESE, HINDI, JAPANESE, and NEPALI

Process Diagram

A schematic overview of the Organizational HIV Treatment Cascade Review is laid out on the next page in **Figure 1: Overview of Organizational Treatment Cascade Data Collection and Reporting**. Template users may refer to the flow diagram for a bird's eye view of the data sorting and reporting process. For a breakdown of patient-level outcome reporting requirements (besides frailty screen), users may refer to **Figure 2: Diagnosis Status and Reporting of Antiretroviral Treatment, Viral Load Suppression & Resistance Testing.**

[Instructions continue on the next page.]

Figure 1: Overview of Organizational Treatment Cascade Data Collection and Reporting

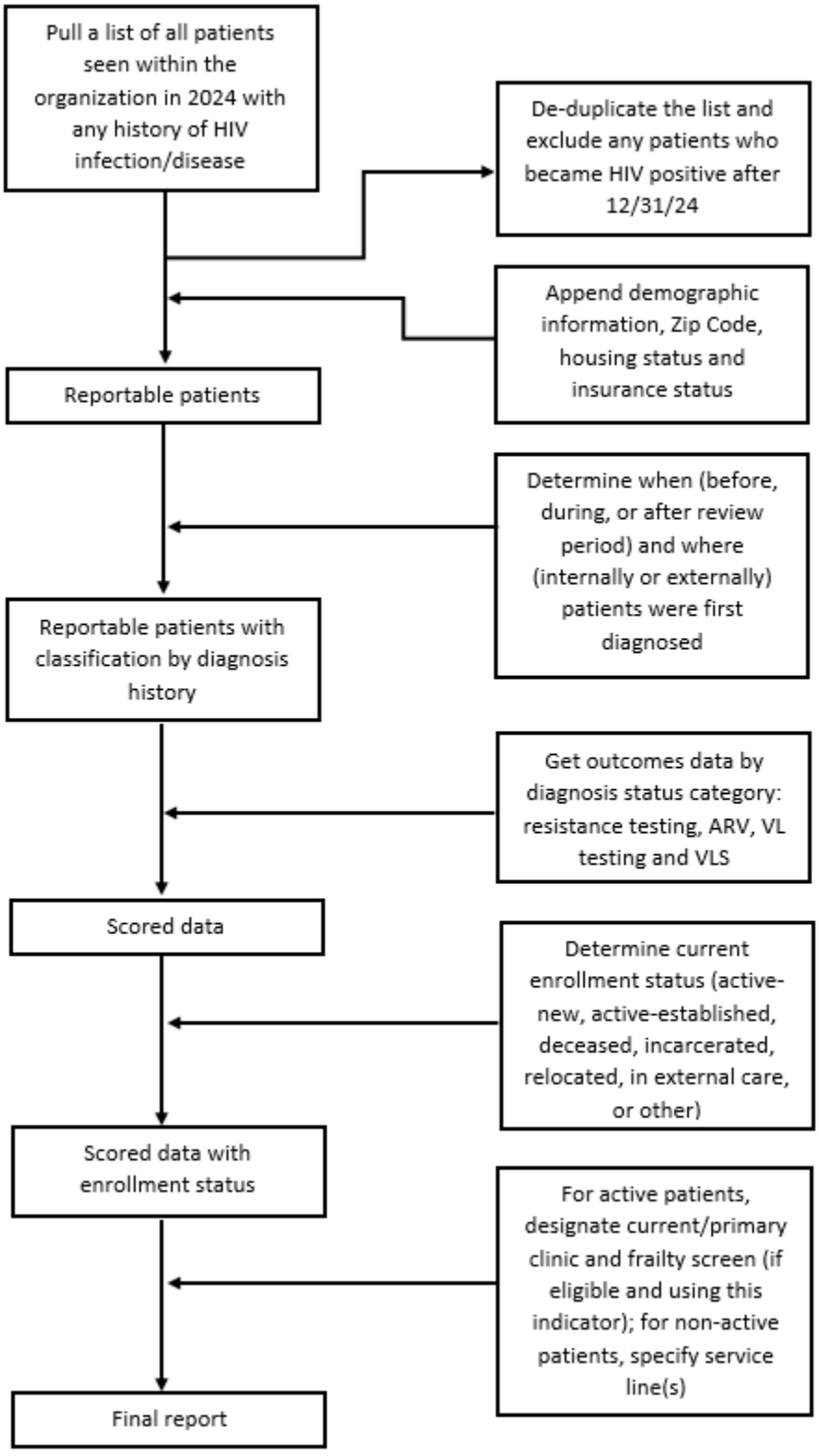
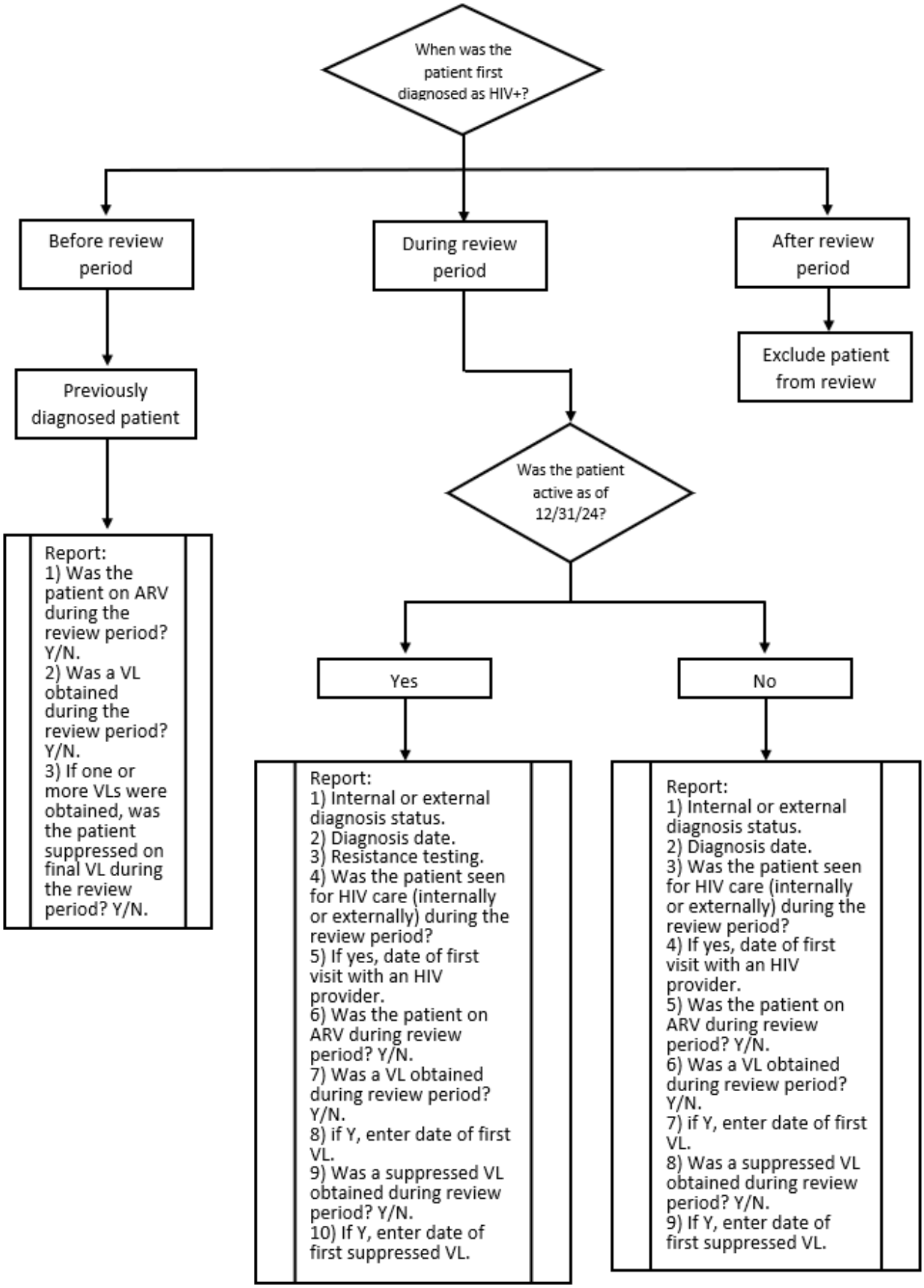


Figure 2: Diagnosis Status and Reporting of Antiretroviral Treatment, Viral Load Suppression & Resistance Testing



Visualizing Cascade Indicator Results and Charts

Indictor eligibility is dependent on care status. Please see the care status chart in Appendix 7 for details.

Please note that all individuals with HIV who were seen at the organization in 2024 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:

- **Newly Diagnosed Patients**: One cascade will automatically be generated for all patients diagnosed in 2024 who had at least one medical or medically supportive care visit within the organization.
    - *Linked-to-Care*: All patients diagnosed with HIV at the organization in 2024 who were linked to care within 3 calendar days from date of diagnosis (and before the end of the review year). A patient is considered to have been linked to medical care if the individual attended a routine HIV medical visit with a treating physician[1] or if the patient was prescribed antiretroviral medication following a positive diagnosis.
    - *Antiretroviral Therapy*: All newly diagnosed patients who were prescribed antiretroviral therapy, other than pre- or post-exposure prophylaxis in 2024. Eligible patients include those enrolled in care ("active") or are of unknown care status as of the end of the review period.
    - *Baseline Resistance Testing*: All newly diagnosed patients enrolled in HIV care 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 (and before the end of the review year). 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 patients with viral load <200 copies/mL within 91 days from diagnosis (and before the end of the review year). Eligible patients include those enrolled in care ("active") or of unknown care status as of the end of the review period.

- **Other New-to-Care Patients**: One cascade will automatically be generated for all patients who were diagnosed prior to 2024 but were new to an organization's HIV clinical care program (or returning after not being seen or having a viral load test in the 2 prior calendar years), having had at least one visit with a medical provider who had the capacity to prescribe antiretroviral medication in 2024.
    - *Antiretroviral Therapy*: All other new-to-care patients who were prescribed antiretroviral therapy in 2024. Eligible patients include those enrolled in care 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 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 viral load test of 2024. Eligible patients include those enrolled in care as of the end of the review period.

[1] A *routine HIV medical visit* is defined as any clinical care visit with a clinician with antiretroviral therapy prescribing privileges where management of HIV disease is discussed. People with HIV are considered successfully linked if they attend this initial medical visit, irrespective of whether antiretroviral therapy is initiated during that visit.

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

    - **Open Caseload:** All previously diagnosed patients who received any services from the organization within 2024, except those who were new to care in 2024 (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.
        - *Antiretroviral Therapy*: All open patients who were prescribed antiretroviral therapy in 2024.
        - *Viral Load Testing***:** All open patients with a recorded viral load test in 2024.
        - *Viral Suppression***:** All open patients with a viral load <200 copies/mL at last viral load test of 2024.
    - **Established Active Caseload:** All previously diagnosed patients who received HIV clinical care services from a medical provider with the capacity to prescribe antiretroviral medications within the organization in 2024, except those new to care in 2024.
        - *Antiretroviral Therapy***:** All established active patients who were prescribed antiretroviral therapy during 2024.
        - *Viral Load Testing***:** All established active patients with a documented viral load test in 2024.
        - *Viral Suppression***:** All established active patients with a viral load <200 copies/mL at last test of 2024.

- **Older Patient Caseload:** While we have been reporting breakout data by age for antiretroviral therapy, viral load testing and viral suppression, we have now introduced an optional assessment of frailty screening among older patients. This applies only to patients enrolled in care, and the age cutoffs (at end of year) are 51 years or older for established patients and 61 years or older for newly diagnosed and other new to care patients.

Other features of the cascade data:

- Automated drill down of established active caseload by key characteristics**:** this will help identify ongoing disparities in clinical outcomes among subpopulations of people with HIV enrolled in an organization's HIV primary care program.
- We automate calculation of the active caseload, prescription of antiretroviral therapy, receipt of a viral load test, and viral suppression rate for each of these subgroups.
- Service delivery points for non-active caseload**:** to better target re-engagement interventions among people with HIV without evidence of ongoing HIV care, organizations will be expected to report the **service delivery points** visited by open-caseload people with HIV 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 automate calculation of how many non-active patients were seen at each delivery point.
    - Service delivery points include:
        - Emergency Department/Urgent Care
        - Inpatient care, including intensive care unit, surgery, and psychiatric care.
        - Primary care (outside of HIV clinic(s))
        - Faculty practice HIV care

- Non-HIV specialty care such as cardiology, pulmonology, etc.
- Reproductive health services
- Mental and behavioral health services
- Dental services
- Supportive services
- 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 were service delivery points determined and verified for non-active open caseload patients?
- ✓ How were patients determined to be deceased, relocated outside New York State, 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?
- ✓ If using the optional frailty indicator, please provide information on the screening tool(s) used and how patients were selected for screening.

Key Findings

This description should cite specific data from the cascades and explain how these indicate any 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 2023 and 2024 cascade results.
- ✓ Include a description of quality improvement interventions that were tested throughout 2024.
- ✓ 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 2024?

Developing a Quality Improvement Plan

Organizations will be asked to submit an analysis and quality improvement plan that uses the identified outcomes 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., New York Links 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.

[Instructions continue on the next page.]

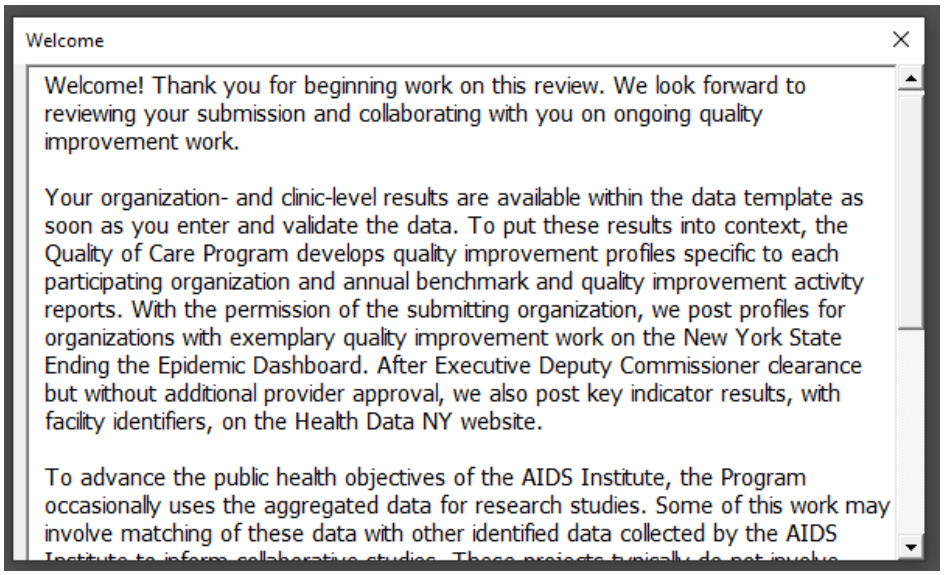
Use of the Data Reporting Template

NOTICE: The browser-based versions of Office/Excel 365 do not support Excel macros. Template users must use a desktop version of Excel and enable macros for the template to function properly. For security reasons, users are strongly cautioned not to use versions prior to Excel 2010. Use of earlier versions, including Excel 2007, is not supported and may also be incompatible with some of the macros in the template.

Overview

The Excel submission template is password protected. To unlock the template, primary contacts at the organization should use the password provided to them by the Quality of Care Program staff.

PLEASE NOTE: When the template is opened for the first time, a welcome screen (see screenshot below) will be displayed. This provides general information about the collection, reporting and subsequent use of treatment cascade data. Click on the "X" in the top right corner to close this form after you have read the welcome message. See the earlier portions of this guidance document for more information about our data use policies.



The template consists of 11 worksheets whose tabs are located at the bottom of the spreadsheet. They are listed below in order from left to right:

- **Preliminary_Information**
  - Year of review period (preset).
  - Select name of organization from drop-down menu.
  - Enter name of person submitting data.
  - Enter email address of person submitting data.
  - Enter name of person who authorized submission.
  - Enter email address of person who authorized submission.

- Clinic list with name and code will appear after organization is selected from drop-down menu.
- Specify whether or not you will be submitting optional data on frailty screening (default is YES).

- **Patient_Data_Template**
  - Top half contains a menu of allowed values to select from, along with definitions of abbreviations (i.e. TGW = transgender woman).
  - Bottom half contains a table with one row per patient to be filled in based on the values listed in the menu directly above.
  - Use the horizontal scroll bar to navigate between columns.
  - Certain cells may be filled in using drop-down menus.
  - Multiple selection is possible as needed (see Entering Patient-Level Data section of this document).
  - Dates should be typed in using the format *m/*d/yyyy (e.g., 3/5/2024 rather than 03/05/2024).
- **QI_Tools**
  - List of quality improvement tools for use in planning QI projects.
  - Select YES or NO from drop-down menu to state whether tools were or will be used.
  - References for information about these QI tools are provided on the template.
- **Statements**
  - Follow the prompts in the template when entering written statements for the following sections:
    - Methodology
    - Analysis and Key Findings
    - Planned QI Projects Based on Current Findings (up to three)
      - After running the “Score Indicators” macro via the Control Panel, select an indicator from the drop-down menu for each QI project entered.
      - 2024 rates for each indicator will be automatically calculated and appear next to the indicator selected. Enter the 2025 goal for each indicator as an integer that represents the targeted percentage (e.g., “90” to specify a goal of 90%).
    - Consumer Involvement
- **Control_Panel**
  - 2 buttons facilitate data entry:
    - “Hide Patient Data Template Headers” enables viewing more data entry rows.
      - Can be cleared by clicking the “Restore Patient Data Template Headers” button.
  - 8 buttons automate error checking:
    - “Check Patient Data for Errors” highlights errors and warnings in the Patient_Data_Template worksheet.
      - Can be cleared by clicking the “Clear Patient Data Error Counts” button.
    - “Check for Duplicated Patients” highlights duplicated and possibly duplicated patients.
      - Can be cleared by clicking the “Clear Duplicated Patient Count” button.
    - “Check for Other Errors” highlights missing information on the Preliminary_Information worksheet, empty statement fields, unspecified QI tools and missing explanations for patient-data warnings. This should be done as a final check after validating and analyzing the data, specifying use of QI tools and entering all requested responses on the Statements sheet.
      - Can be cleared by clicking the “Clear Other Errors” button.
  - 8 buttons automate data scoring:

        - "Score Indicators" presents calculated numerators, denominators, and percentages of cascade indicators as well as other measurements for the entire caseload and subgroups, and it generates corresponding graphs on the Charts worksheet.
            - Can be cleared by clicking the "Clear Indicator Scoring" button.
        - "Generate Scored Patient-Level Data" presents diagnosis and enrollment status, demographic information, housing, risk factor, insurance, linkage status, antiretroviral treatment status, viral load testing, and suppression status for deidentified individual patients in the Scored_Data worksheet.
            - This can take several seconds if you have a large caseload.
            - If desired to facilitate cross referencing with additional patient-level data, patients can be partially reidentified through inclusion of medical record numbers. This option will be presented after clicking on the button.
            - Can be cleared by clicking the "Clear Scored Patient-Level Data" button.
        - "Generate PivotTable Report" presents a report in which the fields including diagnosis and enrollment status, demographic information, housing, risk factor, insurance, linkage status, ARV status, VL testing, suppression status and frailty screen (if applicable) can be added and removed to the report as chosen to isolate subgroups and view areas to improve.
            - You must run "Generate Scored Patient-Level Data" first for this to work.
            - Can be cleared by clicking the "Remove PivotTable Report" button.
        - "Generate Analytical Data (Prev. Dx. Active Patients)" populates the Data Analysis worksheet with binary data representing patient characteristics and outcomes for these patients. This can then be used to run chi-square tests and logistic regression analyses.
            - This can take several seconds if you have a large caseload.
            - You must run "Generate Scored Patient-Level Data" first for this to work.
            - If medical record numbers were included when generating scored patient-level data, these will be retained during this step.
            - Can be cleared by clicking the "Clear Analytical Data" button.
    - One button automates sorting of patients:
        - After selecting the desired sort fields and sorting order for each (ascending or descending), click on the "Sort Patients" button.
        - CANNOT be reversed unless already sorted exclusively by the data fields. Please create a backup copy of your template before performing a sort.
- **Charts**
    - Presents an automatically generated graph showing percentages of established active, newly diagnosed, other new patients and inactive patients who are on antiretroviral therapy, received a viral load test, and are virologically suppressed. Other graphs look at results by demographic categories and individual clinic where applicable and linkage of newly diagnosed patients.
        - Graphs appear only after the "Score Indicators" button is clicked.
        - Graphs disappear after "Clear Indicator Scoring" is clicked.
- **Scored_Data**
    - Presents diagnosis and enrollment status, demographic information including ZIP Code and primary language, housing status, exposure risk factors, insurance, linkage status, antiretroviral therapy status, viral load testing, suppression status and frailty screen (if applicable) for individual de-identified patients listed by number.

        - Scored data appear only after “Generate Scored Patient-Level Data” is clicked.
        - Scored data disappear after “Clear Scored Patient-Level Data” is clicked.
- **Pivot_Table**
    - Presents a PivotTable report in which the fields, including diagnosis and enrollment status, demographic information, housing, risk factor, insurance, linkage status, ARV status, VL testing, suppression status and frailty screen (if applicable) can be added and removed as desired to isolate subgroups and view areas to improve (do not check the Defer Layout Update box as this will lead to formatting problems).
        - The PivotTable report appears only after “Generate PivotTable Report” button is clicked.
        - The PivotTable report disappears after “Remove PivotTable Report” button is clicked.
- **Data_Analysis**
    - This spreadsheet of binary data representing various patient characteristics and outcomes (antiretroviral therapy, testing, viral load suppression) among all previously diagnosed (prior to 2024) active patients provides an opportunity for exploring any disparities among these patients. (Frailty screen data are also available for applicable patients if this indicator has been included in the review.) Choices include simple chi-square tests and more elaborate regression analyses. This sheet can also be used as a “scratchpad” for other analyses of your data.
        - Data only appear after “Generate Analytical Data” button is clicked.
        - Data are erased after “Clear Analytical Data” button is clicked.
- **Indicator_Definitions**
    - Lists and defines indicators, formal and informal, and how they are calculated.
        - Example: For the indicator “Antiretroviral therapy among open patients,” the numerator is “Eligible patients for whom *arv* = ‘YES’” and denominator is “All patients for whom enrollment equals ‘ACTEST’ or ‘OTH’ and diagnosis equals ‘PREV’ or ‘UK.’”
- **Field_Descriptions_&_Validation**
    - Lists field name, corresponding validation rules and warnings, and special formatting/values accepted.
    - If an input violates one of the “Validation Rules,” it will be highlighted in red on the applicable worksheet after checking for errors using the control panel buttons.
    - If an input fulfills a condition in the “Other Warnings” category, it will be highlighted in yellow on the applicable worksheet after checking for errors using the control panel buttons.

[Instructions continue on the next page.]

Data Collection and Validation

Collecting Patient-Level Data

Appendix 1 gives the required patient-level information for this year's review, along with field types and allowed values that may be entered in the template. The mechanism for collecting this information will depend on your medical information systems, data reporting software, and procedures you have in place for validating your data. Please see below for suggestions on how to enter the data into the template.

"Exclusions"

In some previous reviews, patients who were deceased, incarcerated, or confirmed to be in external care by the end of the measurement year were excluded from the HIV organizational treatment cascades. In this review, as in recent years, **they are included in the reporting** but identified under the enrollment category in the Patient Data Template and assigned the following values (see Appendix 1 for complete table of fields values and Appendix 7 for general glossary of terms):

- DEC (= died during the review period)
- INC (= incarcerated as of end of review period)
- RELOC* (= relocated out of New York State during the review period)
- EXTCARE* (= confirmed to be receiving ongoing HIV care at another site as of end of the review period)

*NOTE: In order to categorize patients as 'RELOC' or 'EXTCARE,' providers should have confirmation that the patient is in fact relocated out of New York State or receiving ongoing HIV care at another site. For the latter, confirmation entails having the name of the external provider on record. However, while organizations should have the name of the external provider for their own purposes, the review program is not asking for it to be submitted as part of the cascade data.

<u>The only patients with HIV who should be excluded when filling out the Patient Data Template are those who were first diagnosed as having HIV after 12/31/24 or who had no medical or medically supportive care visits in 2024.</u>

Entering Patient-Level Data

Go to the "Patient_Data_Template" tab listed at the bottom of the spreadsheet. The patient data template consists of two parts:

- In the upper half, a menu consisting of all possible values to select from, along with definitions of abbreviations (i.e. TGW = transgender woman). If desired, this section can be compressed by clicking the "Hide Patient Data Template Headers" button on the Control Panel sheet.
- In the bottom half, a table with one row per patient to be filled in based on the options listed in the menu directly above. Here, the filtering tool may be used to select different subgroups of patients to view at any one time.

Recommended way to fill in patient information:

- Review the list of possible values for each category in the Patient Data Template to ensure consistency.
- Set up patient information in a separate blank Excel file, following the same format as the Patient Data Template, including number and order of columns.
- Copy the cells in the external Excel spreadsheet. In the Patient Data Template, paste the information using the "Values (V)" option.
- Any input that does not fit the values defined by the template will be highlighted when checking for errors. These can be easily corrected using drop-down menus for the cells that have them (if there are only a few errors) or repeating the above steps.

How to fill in patient information manually:

- Fill out one row per patient.
- Use the horizontal scroll bar to navigate between columns.
- For cells that have a drop-down menu, click the down arrow to reveal the menu and then select a category. Refer to the menu above for definitions of terms.
    - To select multiple values for a field (e.g., ASIAN and NHPI for Race), simply repeat this action as many times as needed (once per value).
    - To clear the cell, left click on the cell and hit 'Delete' on the keyboard.
- For cells that do not have a drop-down menu, type in the information directly.
    - When entering dates, use the following format: *m/*d/yyyy (i.e., month and day without leading zeros and a four-digit year).

Removing empty rows:

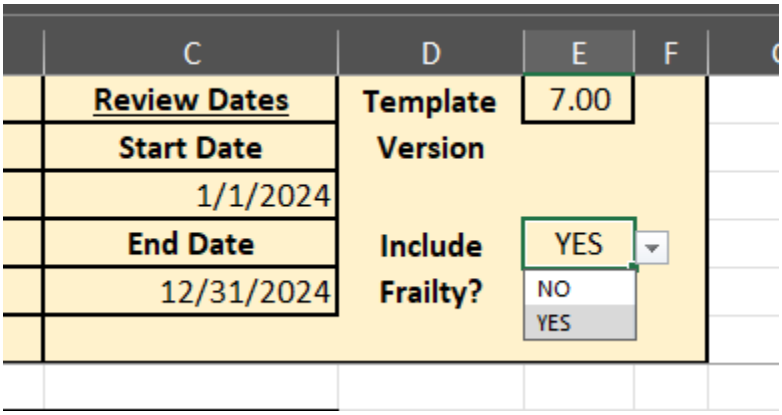
- Empty rows beneath the patient-level data are fine, but any empty rows above or within the included patients will be flagged by the validation process and would cause errors in the scoring. These empty rows can occur if you realize that a patient should not have been included (e.g., misdiagnosed with HIV) or the data are pasted in the wrong location (not at the very top of the available space).
- To delete these rows:
    - Select all the data cells in the applicable row(s) and click the Delete key on your keyboard. (Selecting the row, as opposed to the applicable cells, is not possible due to data protection outside the designated fields.)
    - Click the "Delete Empty Rows" button in the top left corner of this spreadsheet.

Guidance Specific to the Optional Frailty Indicator:

In prior reviews, all components of the review were required for each organization. While some fields only applied to particular subsets of patients, it was not possible to skip the entry of data when it did apply. This requirement has been essential to collecting comprehensive data on the treatment cascade indicators at the organizational level.

This year, we have made an exception to this general policy as we pilot a new indicator for frailty screening. Since we believe this assessment is important within an aging population, the default selection is for participation in this reporting, and we expect to make this a required element in future reviews. Should you decide not to report these data for this review, this selection can be made on the Preliminary Information

worksheet. In the top-right corner, there is a box labeled “Include Frailty?”. Changing this value from YES to NO will allow you to opt out of participation. If you do so, we will not attempt to score or validate data for that indicator.



Please note that if you then change your mind and include these data, you may need to rerun the ‘Check Patient for Errors’ and ‘Score Indicators’ macros on the Control Panel worksheet. See Appendixes 1 and 2 for additional information about the data for this indicator and our list of recommended facility screens.

Using the Filtering Tool:

The filtering tool allows you to select one or more categories of patient information to be viewed at one time.

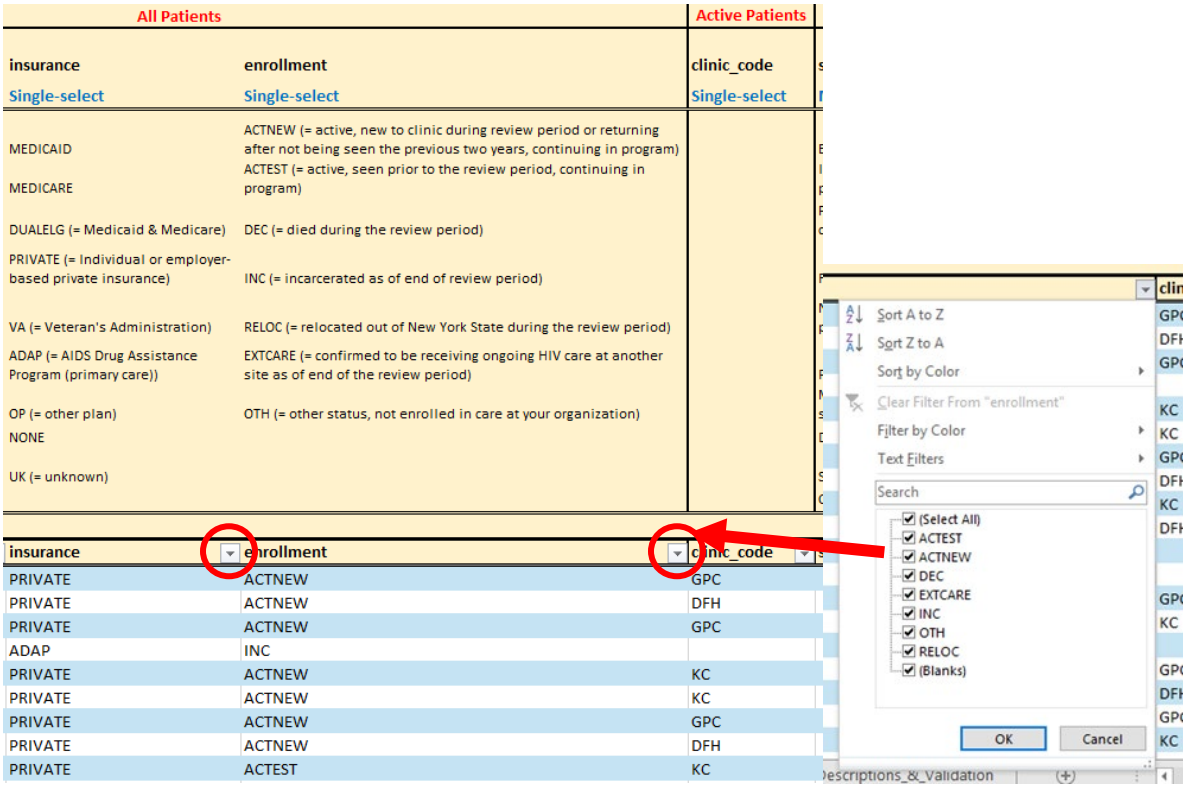
To pick which categories you would like to view, click on a down arrow located in one of the column headings at the start of the patient information rows (see **Image 1** below). A list will appear with checkboxes, which you can click to include or exclude categories that exist under the heading.

For example, checking the box for ACTEST under the “enrollment” heading will restrict the list to all established active patients. Subsequently checking the box for YES under “vl_test_review_year” will further restrict the list of patients to those who are established active *and* received a viral load test in the review year.

Be sure to choose “Select all” or “Clear Filter From [‘enrollment’]” when you are finished filtering for particular categories to restore the full patient list.

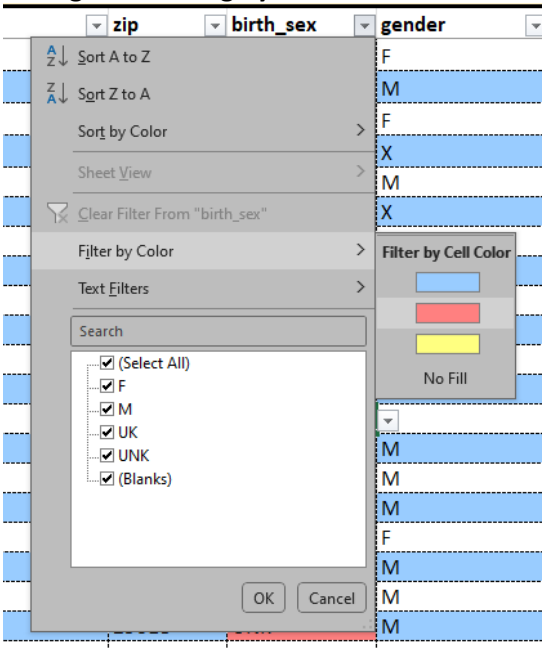
[Instructions continue on the next page.]

Image 1: Using the Filtering Tool.



Filtering can also be done using the fill color for cells, rather than the values in them, to make the selection. This can be especially helpful when validating the data. If you filter the patient data by the values in the Data Alerts column, you will see any rows with one or more errors or warnings, but if you filter by color on a particular field, you will just see the patients who have alerts for that field. In the example below (Image 2), we are detecting errors in the Birth Sex column by filtering on red cells. (The errors here are due to the entry of “UNK” instead of “UK” to record a person whose birth sex was unknown.)

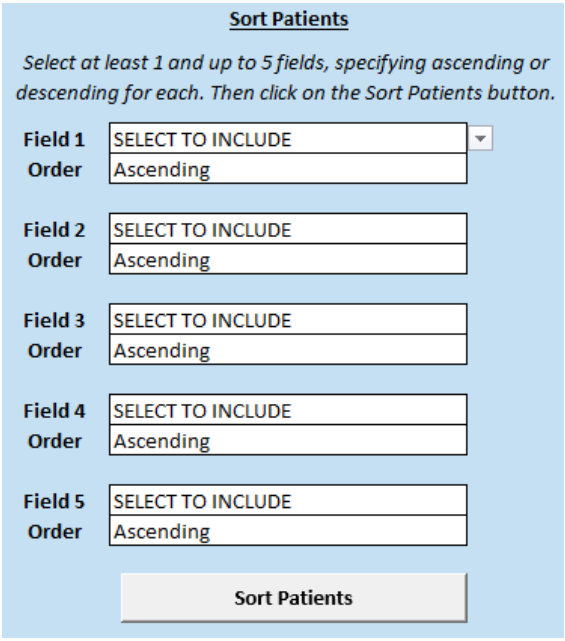
Image 2: Filtering by Color.



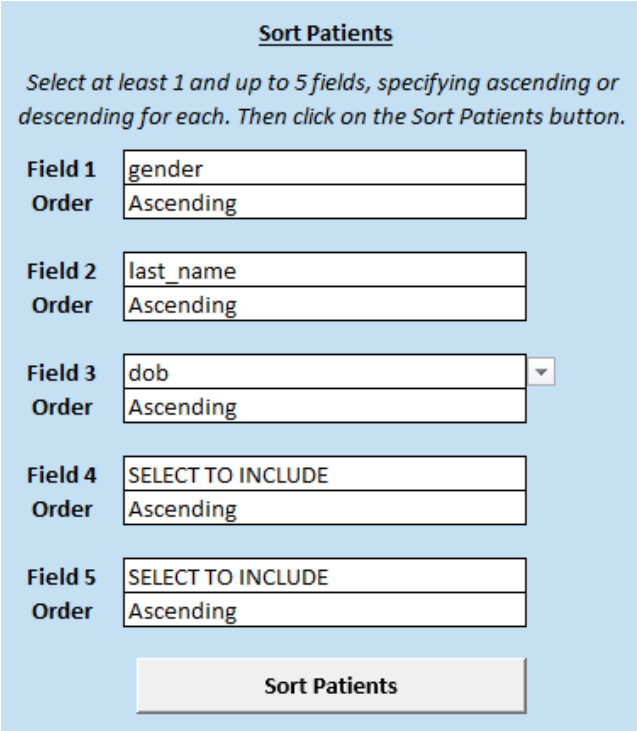
Using the Sorting Tool:

Unless you have fewer than 100 patients and are entering everything "by hand," we recommend that you use another Excel file (or comparable spreadsheet) as an initial staging area before copying and pasting your processed data "as values" into the template. That initial spreadsheet would typically have all of the columns that are included in the Patient Data Template sheet in the final template and perhaps a few others for data manipulation. Using Excel's standard data manipulation tools on the Data tab, the patients can be filtered and sorted as needed to organize and review the data. However, there may be times when it is helpful to sort the data after they have been entered into the data submission template. That cannot be done in the standard way given the constraints imposed in the template to ensure data integrity. However, we have incorporated a feature on the Control Panel sheet to enable sorting of the patients on the Patient Data Template sheet. It is important to note that sorting is only reversible if the data are already sorted by some combination of the fields on the template and not some other factor (e.g., the order they were first seen in your clinic, or by some patient ID other than MRN, etc.). We always recommend saving the file, perhaps with a new name, before sorting.

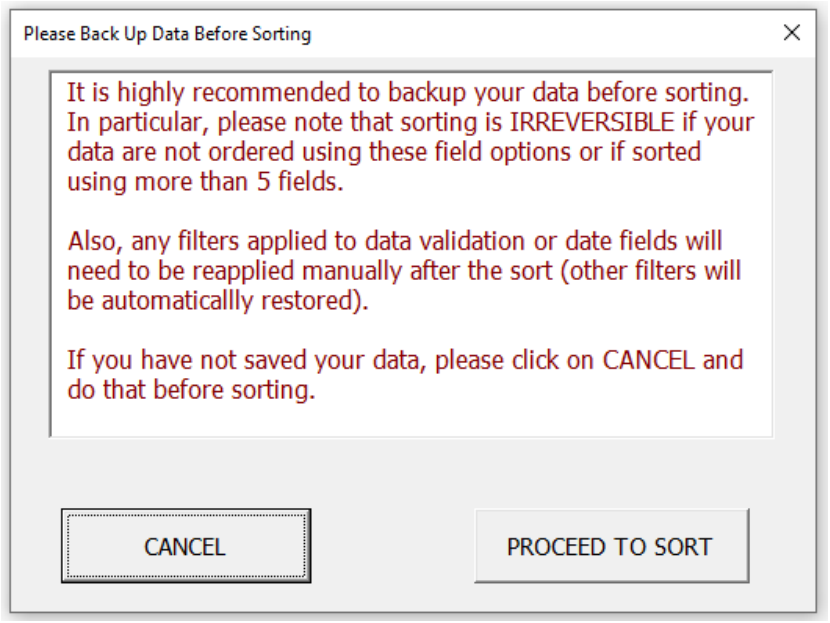
The data sorting tool has no initial selections:



To sort the patients, select the fields to be used and whether each field should be applied in ascending or descending order. The first field will determine initial sorting, and any subsequent fields will define sorting within each value for the first field. For instance, if you sort by gender, last name and date of birth as pictured below, all of the female patients will be placed before all of the male patients, and within each gender group the patients will be sorted by last name, with the oldest patient listed first if two or more patients have the same last name.



After clicking on the Sort Patients button, you will be cautioned about the potential irreversibility of the sorting as described above. If you have saved the file and are sure that you want to sort the patients, click on the Proceed to Sort button:



Also of note:

1. Any data validation markup and tallies (for patient data errors or duplicate patients) will be cleared prior to sorting, and any filters applied to these columns (A and B) on the Patient Data Template will need to be reapplied manually after sorting.
2. Any date-based filters (except “UK” or blank) will also need to be reapplied manually.
3. Any other filters will be automatically reapplied afterwards.

Data Validation

Go to the "Control_Panel" tab listed at the bottom of the workbook. The second, third and fifth buttons in the "Do" and "Undo" columns on this worksheet are used for validation and will check the data for any patient data errors, duplicated patients, and other errors including missing preliminary information and empty statement fields.

Checking patient data for errors:

- Click on the button labeled "Check Patient Data for Errors." A pop-up window will direct you back to the Patient Data Template worksheet, where errors are now highlighted in red and warnings are highlighted in yellow. In addition, an "_ERR_" message will appear in the first column of the worksheet, labeled "Data Alerts."
    - Red indicates that the data input violates the validation rules and must be corrected. To see the explanation of an error, go to the "Field_Descriptions_&_Validation" worksheet and review the "Validation Rules" column.
    - Yellow indicates that the data input may be faulty due to an error in that or other related fields. For an explanation, go to the "Field_Descriptions_&_Validation" worksheet and review the "Other Warnings" column.
- To view the number and location of errors and warnings, see the "Patient Data Error Count" and "Duplicated Patients & Other Errors" tables in the Control Panel tab (see below regarding checking for duplicated patients).

How to determine if errors are fixed:

- After correcting any number of highlighted cells, return to the Control Panel and hit the "Check for Errors" button again to obtain the new highlighting.
- Error checking will not update automatically when changes are made. To refresh highlighting after making changes, click "Check for Errors" again.
- To clear the error highlighting, click "Clear Patient Data Error Counts."

Checking for duplicated patients:

- Click on the button in the Control Panel labeled "Check for Duplicated Patients." A count of errors and warnings will appear in the "Duplicated Patients and Other Errors" table on the same page. A pop-up window will also direct you back to the Patient Data Template worksheet, where errors are colored in red and warnings are colored in magenta. In addition, an "_ERR_" message will appear in the second column of the Patient Data Template worksheet, labeled "Dup. Alerts."
    - When one patient is possibly duplicated, an error message will appear next to both matching rows. This means that two errors in the "Dup. Alerts" column will refer to one duplicated patient.
    - Errors are marked when two or more patients are matching in 5 out of 5 categories: first name, middle initial, last name, date of birth, and medical record number (optional). If the medical record number (MRN) is not included, errors are marked for 4 matching categories out of 4.
    - Warnings are issued when two or more patients are matching in 4 out of 5 (or 3 out of 4, excluding the MRN) of the previously listed categories.

Checking for other errors:

- "Other errors" refers to missing preliminary information, empty statement fields, missing responses to questions about fields with warnings (see below) and unspecified QI tools.
- After clicking on the "Check for Other Errors" button, a count of errors will appear in the "Duplicated Patients and Other Errors" table on the same page. If errors are shown, you must go to the appropriate tabs to ensure that all required information is entered in the submission template.

Responding to Warnings:

In recent cascade reviews we have emphasized that all warnings should be reviewed and corrections made where applicable and practical. However, we realize that there are reasons why some information may not be available or appear to be "contradictory." We have relied on post-submission communication between the participating organization and AIDS Institute staff (Quality Coach and Data Analyst) to ascertain the nature of problems, what has been done to address them and whether anything further can be done. This has often proven time consuming for everyone involved. To expedite this process, we are now requesting an explanatory comment within the template itself, on the Control Panel sheet, which will be available to the Coach and Data Analyst as they review the submission.

After the data have been validated and any possible problems addressed, enter a comment for any field with one or more warnings identified (i.e., if a cell in the range N4:N39 has a number greater than zero, then a corresponding comment should be entered in the applicable cell in the range 04:039). These comments should be sufficiently detailed so as to provide an understanding of data limitations and decisions but should not reference particular patients. See the example here for the general sense of this. Your comments will depend on the nature of your patient data and its limitations.

K	L	M	N	O	P	Q	R	S

Patient Data Error Count			
Field Name	Errors	Warnings	Response to Warnings
first_name	0	0	
last_name	0	0	
middle_initial	0	0	
dob	0	0	
mrn	0	0	
zip	0	0	
birth_sex	0	13	Sex at birth is not available for our patients who transferred from the recently closed clinic in ....
gender	0	13	Some of our patients who were classified as male at birth identify as "female," rather than as "transgerder."
ethnicity	0	0	
hispanic_subgroup	0	0	
race	0	0	
asian_subgroup	0	0	
nhpi_subgroup	0	0	
language	0	0	
other_language_specify	0	0	
housing	0	0	
hiv_risk	0	0	
insurance	0	0	
medicaid_number	0	0	
enrollment	0	0	
clinic_code	0	0	
service_line	0	0	
other_service_specify	0	0	
diagnosis	0	0	
arv	0	0	
vl_test_review_year	0	0	
diagnosis_date	0	0	
resistance_test	0	0	
hiv_clinic_visit	0	0	
hiv_clinic_visit_date	0	0	
arv_initiation_date	0	0	
suppressed_ever_review_year	0	0	
first_vl_date_newly_dx	0	0	
first_suppressed_date_newly_d	0	0	
suppressed_final_review_year	0	0	

Tips for Reviewing and Responding to Warnings:

Important General Points:

1. At the extreme right of the tabs on the bottom the template, there is a Field Descriptions and Validation worksheet. This contains detailed information about all the reasons for every possible error or warning identified in the validation process.
2. Warnings identified for one field are often related to entries in another field (e.g., the relationship between Sex at Birth and Current Gender or between Insurance and Medicaid Number), and what has been identified as a warning may actually reflect an inaccurate value in the other field.
3. While the reasons for some warnings may be obvious, it is important to examine all fields for the possibility that other factors, including possible data errors, may be involved.
4. Even when the explanation is straightforward, some statement should be entered for each field where any warnings are displayed.
5. These responses can be brief but should contain meaningful information regarding the reason for the warnings (e.g., "Many of our Hispanic patients do not identify as another race," rather than "Missing data for Race").
6. However, **no information (besides row number in the template) that could be used to identify specific patients should be entered in these responses**. That includes patient names, medical record numbers, birth dates and other exact dates. If necessary to make a point about, for instance, missing information for patients diagnosed late in the year, a generalized statement or approximate dates (year or month but not day) should be used instead.

Guidance Related to Certain Specific Fields:

- DOB: All patients reported as being under 5 years old or over 90 at the end of the review period are flagged as warnings in this field. This serves two purposes: a chance to confirm that the dates are correct, and a reminder that only certain values are likely to apply for these patients, especially those related to gender identification and exposure risk. So, an appropriate response could be along the lines of this: "Dates of birth for these 5 individuals were confirmed in our electronic medical record system. Entries for current gender are age appropriate. The pediatric patients are reported as perinatally diagnosed, and the other two patients had sexual exposure risks. No problems were identified."
- Birth Sex and Current Gender: An entry other than "UK" (unknown) is required for at least one of these fields; an error will be generated otherwise. Warnings for these fields relate to "contradictory" information. While the data may appropriately reflect patient choice (e.g., female designation at birth but currently identifying as "male," rather than "transgender man"), these warnings can also identify data entry or transcription errors (e.g., confusion of "transgender man" and "transgender woman"). So, an appropriate entry might be, "After correction of one mistake, the three remaining warnings relate to patients who were assigned a male identity at birth but identify as female, rather than transgender."
- Asian Subgroup and NHPI Subgroup: These values are often unknown, and entry of "UK" will not generate a warning. There can be confusion, however, around the distinction between Asian and Native Hawaiian/Pacific Islander patients. Also, patients of mixed racial background (e.g., white and Asian) may also have entries here without a corresponding entry included in the Race field ("ASIAN" in

this case). These warnings should usually be fixable and not require a comment after the corrections have been made.

- Other Language Specify: There are two reciprocal reasons for warnings here: (i) an entry of "OTH" (other) was made in the Language field but the Other Language Specify field was left blank; (ii) the entry for Language was something other than "OTH" (i.e., one of the 12 most common languages, which are included in the picklist for Language), but there is also an entry in the Language field. In the first instance, the solution is to add the patient's (uncommon) primary language in Other Language Specify or to enter "UK" if this is unknown. In the second case, the problem is typically one of interpretation: we are asking for the name of the patient's primary language if not one of the 12 most common, but users may enter instead the patient's second language. This can be addressed by removing these entries. If that poses a burden, a response to the warning might be "Patient's second language entered in this field."
- HIV Risk: The most common warning for this field relates to missing information among patients enrolled in care. However, it is important to check the other two possibilities: (i) exposure risk is entered as "MSM" for a patient whose current gender is neither "male" nor "transgender man" and (ii) other exposure risks (e.g., "IDU") are combined with perinatal exposure ("PERI"). The former may reflect an accurate description of patient self-identification but could also be a data entry error. The second is usually the result of combining information about recent or current behavior with information about original exposure risk, which is what we are seeking to determine. Please fix whatever can be done readily, particularly related to clear cases about perinatally infected patients, and explain the other cases (collectively).
- Medicaid Number: These warnings are generated when a Medicaid number is entered for patients who are not specified in Insurance as either receiving either "MEDICAID" or "DUALELG" coverage. This may reflect the collection of information about both primary and secondary insurance or simply a missed entry in the Insurance field. These problems should typically be fixable, but if any warnings remain please explain the particular reason (without identifying specific patients except, where helpful, the relevant row numbers in the template).
- Clinic Code, Service Line and Other Service Specify: Entries for Clinic Code that do not correspond to the codes for your clinics or non-standard entries for Service Line will generate an error. Warnings for these fields relate to missing or apparently contradictory information. For Clinic Code, warnings are generated for non-active patients (i.e., Enrollment does not equal "ACTNEW" or "ACTEST") because the intention is to specify where patients are receiving ongoing HIV care, not where they otherwise "touched the system" (as this is handled separately). For Service Line, warnings are generated when entries are made but not required (Enrollment not equal to "OTH"). This reflects the fact that we have information about where the patients are in HIV care (within the reporting organization or externally), and we do not need the "point of contact" information to facilitate linkage to HIV care. Warnings related to Other Service Specify can also be for unrequested information on patients in care or for missing information when Service Line is "OTH." Please try to align data collection with the intention of these fields. Where that is not practical, please investigate for any possible errors within the warnings and then describe what happened (along the lines of what is mentioned here).
- HIV Clinic Visit Date and Resistance Test: Warnings are generated when responses are entered for patients for whom the data are not requested. For HIV Clinic Visit Date, this would be any patient not specified as being diagnosed with HIV during the reporting period. For Resistance Test, the request is even more specific: newly diagnosed patients who are enrolled in care by the end of the year. In both cases, the problem should be fixable through removal of inapplicable data.

- ARV Initiation Date, First VL Date and First Suppressed VL Date: As in the case above, warnings are generated when data are entered for patients not diagnosed with HIV during the review year. This should be fixable through removal of unrequested data. However, **all warnings for First Suppressed VL Date should be given close attention by a clinician familiar with HIV care** as there are two other types of warnings that may be generated for this field: (i) the date entered is before, on, or less than 7 days after the date entered for ARV Initiation Date and (ii) the date entered is less than 7 days after the diagnosis date. There are various reasons why these entries may actually be accurate, including treatment outside your medical organization prior to first visit within the organization, seroconversion among patients who had been receiving pre- or post-exposure prophylaxis, or patients who prove to be "elite controllers." However, it is also possible that one or more of these fields is incorrect for some patients. Of note, the ARV Initiation Date should reflect prescription of medication intended as a complete treatment regimen, not continuation of pre- or post-exposure prophylaxis. It is also important to check that the Diagnosis Date reflects the first time the patient was diagnosed with HIV, not the administration of routine in-house confirmatory testing for externally diagnosed patients. Once all cases have been reviewed, please make any necessary corrections and then describe the reasons for any remaining warnings in the response for this field.
- Suppressed Final Viral Load: There are two reasons for warnings in this field: (i) "YES" or "NO" responses for newly diagnosed patients (as this indicator does not apply to them) and (ii) entries of "NO" or "UK" for patients who did not have a viral load test during the review year (since "NA" is expected instead). The first case should be fixable through removal of unrequested data. The latter case can be handled by substituting "NA" or adding a note in the response mentioning that "UK" was used instead ("NO" would not be an appropriate entry as this cannot be known if the patient was not tested).
- Frailty Screen: Validation of this field is only performed if the indicator has been selected on the Preliminary Information worksheet (default value is YES). When validated, any errors would relate to missing or spurious entries for eligible patients. Of note, eligibility is restricted to active patients (enrolled in HIV care), and the age cutoff depends on whether the patient was newly enrolled in care (>= 61 years old by 12/31/24) or established in care (>= 51 years old by 12/31/24). Any warnings would relate to inclusion of data for patients who are not eligible.

Data Analysis

Calculating Indicator Scores

When all patient-level data have been entered correctly, go to the "Control_Panel" worksheet and click on the "Score Indicators" button. The newly calculated scores will appear in tables on the same page, while the corresponding graphs will appear in the "Charts" worksheet.

Generated charts:

- Bar graph showing cascade indicators
- Pie chart showing linkage of internally diagnosed patients
- Bar graphs showing cascade results among subgroups of established active patients including:
    - Age
    - Gender*

    - Race
    - Ethnicity
    - HIV risk factor
    - Housing status
    - Insurance status
- Bar graph showing cascade results by clinic for established active patients
- Bar graph showing service line encounters among unknown-status patients

*Based on the 'current gender' field, not 'sex at birth.'

The indicator scores will not automatically update themselves when the data are updated. Click on the "Clear Indicator Scoring" button to erase the previous calculations when changes to the patient-level data have been made. Then click the "Score Indicators" button again.

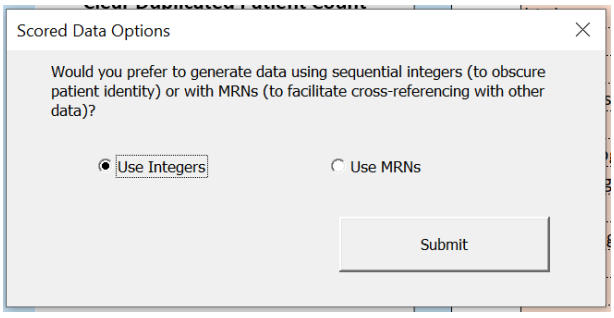
Generating the Patient-Level Scored Data Report

When all patient-level data have been entered correctly, go to the "Control_Panel" worksheet and click on the "Generate Scored Patient-Level Data" button. The newly generated report will appear in the "Scored_Data" worksheet.

"Diagnosis and Enrollment Status" is determined based on input from the Patient Data Template. Definitions of terms within this category are provided in a table in Appendix 7, which is also located in the "Indicator Definitions" worksheet.

The Scored Patient-Data Report also appends information on demographics, primary language spoken at home, housing, HIV risk factor, insurance, linkage if applicable, antiretroviral therapy status, viral load testing in review year, suppression status and frailty screen, if applicable, for each patient. Providers can use the Scored Patient-Data Report as a quick reference tool for finding individual patients' status, and a copy of this information, without patient identifiers, can be used to conduct further analyses such as logistic regression. The filtering options on this sheet are especially useful for selecting which patient subgroups are displayed after the report has been generated.

To enable confidential sharing of patient information in quality improvement-related contexts, the Scored Patient-Level Data Report identifies each patient by a number instead of their name and birth date, yet keeps patients listed in the same order as the Patient Data Template in case reference is necessary. Alternatively, there is an option to display the patient's medical record number as an identifier for cross-referencing with other data sources:



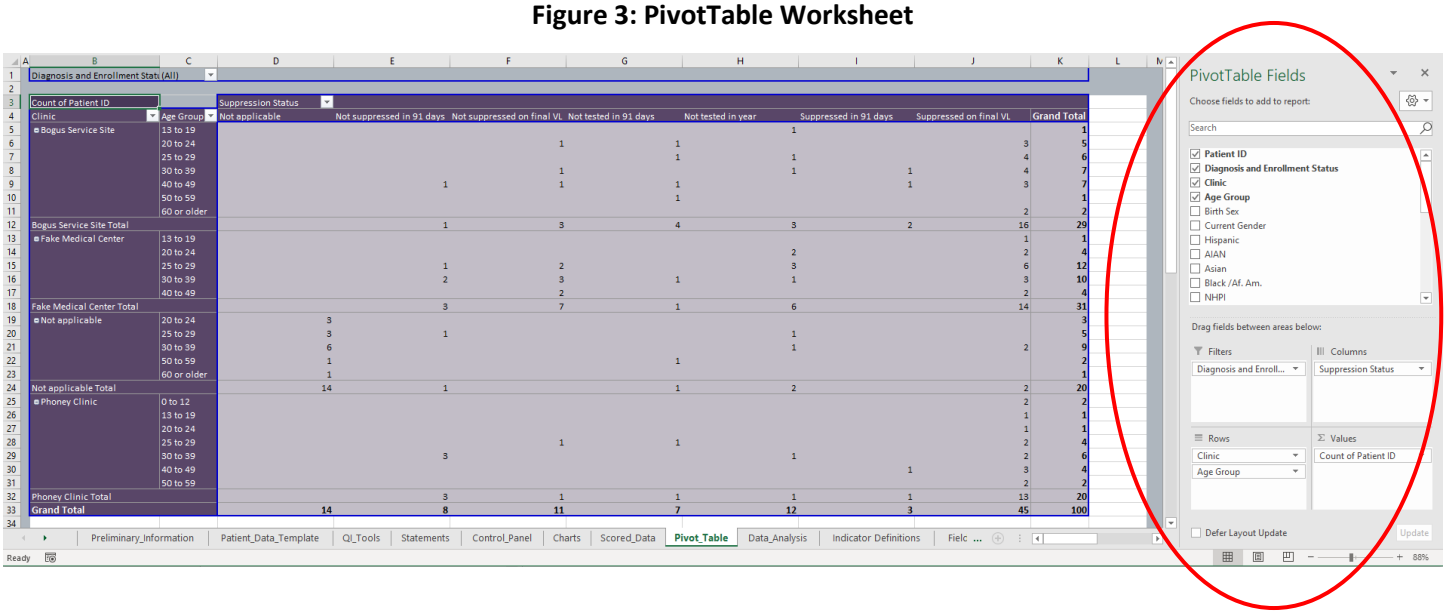
Generating the PivotTable Report

The PivotTable Report can only be generated after the Scored Patient-Data Report has been generated. Go to the “Control_Panel” worksheet and click on the “Generate PivotTable Report” button. The newly generated PivotTable will appear in the “Pivot_Table” worksheet.

The PivotTable allows the user to adjust the variables included in the report by selecting or removing different fields shown on the right-hand side of the Excel worksheet (**Figure 3**). This way, the user can identify gaps in care anywhere along the HIV organizational treatment cascade, for any group or subset of population. Depending on the fields selected (which match the fields in the Scored Patient-Level Data Report), a count of patients will appear under different categories. To arrange the fields in the table, drag the fields into boxes labeled “Filters,” “Columns,” “Rows,” and/or “Values,” also shown on the right-hand side of the worksheet.

Do not check the “Delay Layout Update” box as that will result in problems when the table is automatically reformatted.

Figure 3: PivotTable Worksheet



Additional Analysis of Previously Diagnosed Active Patients

Additional analytical data can only be generated after the Scored Patient-Data Report has been generated. Go to the “Control_Panel” worksheet and click on the “Generate Analytical Data (Prev. Dx. Active Patients)” button. The newly generated analytical data will appear in the “Data_Analysis” worksheet.

Two methods of analyzing outcomes among these patients are provided on this worksheet: chi-square tests of difference between a subpopulation and all other patients, and logistic regression to examine the outcomes while considering multiple patient characteristics simultaneously. Please see Appendix 5 for additional information about these tests.

Statistical tests

Quick Overview of Options and Use

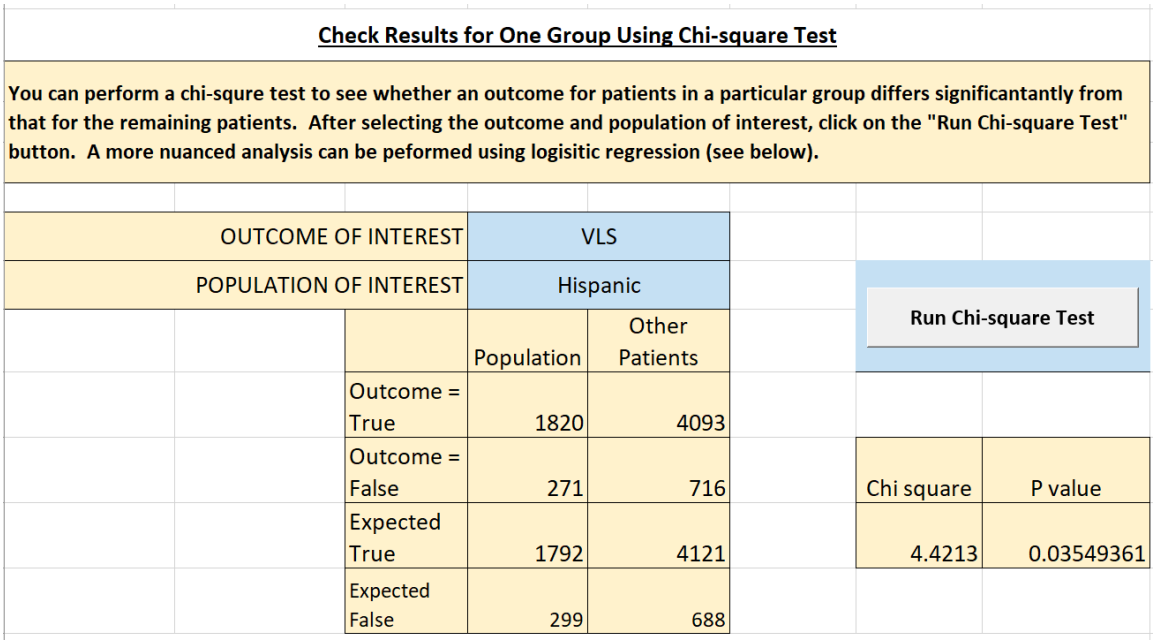
1) While options are provided analyzing antiretroviral prescription and viral load testing, this may not be informative if all or almost all patients were tested and treated. Most often, you will want to select "VLS" (viral load suppression) as there is typically a significant number of unsuppressed patients, at least within larger organizations. If you have included frailty data, you may want to analyze these results as well.
2) For both tests, a P value of less than 0.05 is conventionally deemed to be "statistically significant," but for purposes of data exploration it is more helpful to think generally along the lines of "the smaller the number, the more likely it's not due to chance."
3) Choosing a test:
    a. If you want to compare the outcome for one group against that for all other patients, use the chi-square test tool. This is typically most useful when the group in question comprises a large but not overwhelming percentage of your patients. For instance, if about half of your patients are Hispanic, selecting this option from the Population of Interest could be informative. Likewise, you may want to use this test to compare Black and non-Black patients, those over or under 50, etc.
    b. If you want to take more than one factor into consideration at a time, use the logistic regression tool, preferably after having identified candidate factors using the chi-square test tool. This is most useful if you have a medium to large caseload or a relatively low percentage of suppressed patients. The results are displayed in terms of the P value mentioned above and a coefficient for the regression equation. Details regarding the latter are provided in Appendix 5, but it's helpful to keep two basic ideas in mind: positive values (greater than 0) are indicative that the factor in question increases the likelihood of the outcome being analyzed while negative values (less than 0) suggest that the factor decreases the likelihood; and (ii) the greater the magnitude (absolute value), the stronger the effect. See the Detailed Instructions for further guidance.

Detailed Instructions

To perform a simple chi-square test (see Figure 4), do the following:

1) Select the outcome of interest from the drop-down list. The choices are ARV prescription during the review period ("ARV"), viral load test during the review period ("Testing"), suppression on final viral load during the review period ("VLS") or frailty screen (if data for this indicator were included). Patients who were not tested during the review period are included in the calculations for suppression and counted as unsuppressed.
2) Select the population of interest from the drop-down list. This list includes all the patient-characterizing data entered for the review with some simplification to avoid very small patient subgroups.
3) Click on the "Run Chi-square Test" button. Even with large caseloads, the chi-square statistic and corresponding p value should be generated quickly. P values less than 0.05 are conventionally treated as statistically significant, but this is somewhat arbitrary. Additional insight may be obtained by including seemingly important factors in a logistic regression analysis (see below for instructions and Appendix 5 for additional information).

Figure 4: Chi-square Test



Check Results for One Group Using Chi-square Test

You can perform a chi-squre test to see whether an outcome for patients in a particular group differs significantantly from that for the remaining patients. After selecting the outcome and population of interest, click on the "Run Chi-square Test" button. A more nuanced analysis can be peformed using logisitic regression (see below).

OUTCOME OF INTEREST	VLS
POPULATION OF INTEREST	Hispanic

Run Chi-square Test

	Population	Other Patients
Outcome = True	1820	4093
Outcome = False	271	716
Expected True	1792	4121
Expected False	299	688

Chi square	P value
4.4213	0.03549361

To perform a regression analysis (see Figure 5), do the following:

1) When first using this feature after reopening the workbook (or after encountering any problems), you need to load and initialize the Solver add-in that is bundled with Excel. You can do this by clicking on the “Initialize Solver” button.
2) Select the outcome of interest from the drop-down list. The choices are ARV prescription during the review period (“ARV”), viral load test during the review period (“Testing”), suppression on final viral load during the review period (“VLS”) or frailty screen (if data for this indicator were included). Patients who were not tested during the review period are included in the calculations for suppression and counted as unsuppressed.
3) Choose the factors you want to include in the analysis by changing the values in the blue boxes to "Include" (clear selections individually or with the "Reset All to 'Exclude'" button).
4) Click on the "Run Regression Analysis" button. If you observe the left side of the status bar at the bottom of the Excel window, you will see updates as Solver tries to minimize the value for the negative sum of the log likelihood function (cell H42), which in turn optimizes the values for the coefficients. Depending on the complexity of the regression, it may take several seconds for this process to complete. A message box will then be displayed to let you know if Solver converged on a solution. If so, estimated coefficients for all included factors will be displayed as well as the p value for each. If at least 100 patients are included in the analysis, the Gini statistic—a measure of how well these factors distinguish the patients who are likely to have the desired outcome from those who are not—will also be reported. Here are some indications that you may need to adjust your analysis to get meaningful results (or not use this tool at all if you have a small caseload):
    - The P value for the factor in a regression analysis conducted without inclusion of other factors differs considerably from that seen in the chi-square test for the same factor (some minor variation is expected due to rounding of small numbers within the calculation).

- One coefficient is much larger (positive or negative) than the others, especially if this is for a group that has very few patients who were not suppressed (or tested or on ARV, as the case may be).
- Adding or removing one group greatly changes the results for other factors.

See Appendix 5 for additional information about how to interpret these results.

Figure 5: Logistic Regression

Check Results for Multiple Groups Using Logistic Regression Analysis

OUTCOME OF INTEREST	VLS

Initialize Solver

Run Regression Analysis

Reset All to "Exclude"

To run a regression analysis (see Instructions for more detail):
1) When first opening the file (or after encountering a problem), click on the "Initialize Solver" button and wait for a response (takes a few seconds).
2) Select the desired outcome measure (ARV, Testing or VLS).
3) Choose the factors you want to include in the analysis by changing the values in the blue boxes to "Include" (clear selections individually or with the "Reset All to 'Exclude'" button).
4) Click on the "Run Regression Analysis" button (depending on the complexity of the regression, it may take several seconds to complete).

		INTERCEPT	PRE-DEFINED FACTORS									
			Established in Care	Under 25	Over 50	Birth Female	Birth Male	Transgender	Hispanic	Asian	Black	White
Parameter Estimates	Coefficient	0.72929885	0.917708602		0.21274395				-0.714807			0.515260291
	P > |z| (Wald)		4.40745E-07		0.08727574				3.529E-07			0.000190025
	Gini Score	0.04636259	Include	Exclude	Include	Exclude	Exclude	Exclude	Include	Exclude	Exclude	Include

SCORED DATA AND REGRESSION PARAMETERS				
	OUTCOMES	REGRESSION VARIABLES		PRE-DEFINED FACTORS
		Sum Log Likelihood	-875.6280	

Other uses of this spreadsheet

1) Additional patient characterizing data can be added to the right of the data that are generated automatically. These additional values should also be binary (0 or 1) and align with the corresponding patients. This entails matching the patient on this sheet with the position of the patient in the Patient Data Template sheet (discounting the first 7 rows without patient data). For example, if you have data on current substance use among all previously diagnosed active patients, you could add it to the first user-defined column as seen in **Figure 6** (1 = Yes; 0 = No). Alternatively, you can paste the Data Analysis data to another Excel file, join the data with other data elements using medical record numbers, and then paste everything back into the Data Analysis sheet. In either case, any data elements included in this fashion become available for chi-square tests or logistic regression as previously described.
2) You can use the “Scratch Pad” area of this worksheet for any additional calculations as desired. This can include data from this worksheet or others. To include values from other worksheets, use the “bang operator” (an exclamation point). So, for instance, to assign a cell on this sheet the value of the percentage of male established active patients who were virologically suppressed, you would enter “=Control_Panel!M58” in the formula bar with the target cell selected.

Figure 6: Adding User-Defined Values

		USER-DEFINED FACTORS				
Private Ins.	ADAP	Substance Use	TBD	TBD	TBD	TBD
1	0	1				
0	0	0				
1	0	0				
1	0	1				
0	0	1				
0	0	1				
0	0	0				
0	1	0				
0	0	1				
0	1	0				
0	0	0				
0	0	0				

Using Data for Quality Improvement

Written Statements

The written statements may be either typed directly or typed in an external document and copied and pasted into the text boxes in the "Statements" worksheet. Responses may not exceed the character limits but must provide detailed answers to the prompts given in the template. Detailed checklists for these fields are provided in the introductory and data-submission sections of this guidance document.

Statements:

- Methodology Statement
- Analysis and Key Findings Statement – *Must include results for specific patient subpopulations whose outcomes fall short of expectations for the organization*.
- Descriptions of at least one and up to three QI projects
- Consumer Involvement Statement

Submission of the Template

NOTICE: Do **not** use old versions of Internet Explorer (IE 10 or earlier) to upload the data submission template in the Health Commerce System.

Overview

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 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 Health Commerce System access for these staff:
   a) If your organization is already registered to use the Health Commerce System, contact the organization's Health Commerce System Coordinator to register additional staff as needed.
   b) If the organization does not have a Health Commerce System Coordinator or you do not know if the organization has a Health Commerce System coordinator, you can contact the Health Commerce Accounts Management Unit directly at camusupp@health.ny.gov or by calling them at 866-529-1890.

Please see Appendix 4 for additional details about the Health Commerce System.

2: Review and Validation of the Template

A thorough review of your template data prior to submission is essential to ensuring the validity of the patient data and the integrity of the other elements. The Control Panel worksheet has several macros for this purpose, and prior to submission these should all be run. It is also critical that the results be shared among quality improvement staff at your organization and that the completion of the statements related to methodology, key findings, quality improvement projects and consumer involvement reflect the input of that group.

3: Health Commerce System Submission

Submissions are due by July 18, 2025. 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. Please see Appendix 4 for additional details.

4: Ongoing Coaching

Program staff will provide one-on-one technical assistance to organizations with significant needs. Beginning in June 2025, 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 quality improvement activities to address gaps and disparities in cascade outcomes. Once the data are submitted, Coaches will follow-up with organizations on a quarterly basis.

Before You Submit - A Checklist

To avoid immediate rejection of your submission due to data errors or extensive back and forth with the AIDS Institute regarding other questions or problems, it is critical that you review the following before submitting your data:

1. Confirm that the contact information you have entered on the Preliminary Information worksheet aligns with our expectations
    a. The Submitter and Approver should both be individuals known to the Quality of Care Program.
    b. The emails for these individuals should be work addresses (not personal accounts) that match those we use when sending broadcast emails.
    c. The Submitter will receive feedback on the submission and should be willing to serve as a liaison between the rest of the medical organization and the Quality of Care Program.
    d. The Approver should be someone with medical oversight for HIV care and have been established with us in this capacity. Ideally, this will be HIV Medical Director for the organization.
    e. If you have any questions about the above, please reach out to your Quality Coach or our general email account, qocreviews@health.ny.gov. As always, do NOT attach the template to any email communications.
2. Run all three error-checking macros on the Control Panel worksheet.
    a. "Check Patient Data for Errors":
        i. Any "errors" that are identified must be corrected on the Patient Data Template worksheet. After making the corrections, rerun this macro to make sure that there are no errors (you should see a value of zero in all cells from M4 to M39 on the Control Panel). Even a single error will cause the submission to be rejected.
        ii. Please review all "warnings." While these may just reflect the limits of your data, some may bring attention to problems that can be corrected. After making all possible corrections, enter an explanatory comment for any fields that have one or more warnings (i.e., for any cell in N4 to N39 on the Control Panel that has a value greater than zero, enter a comment in the corresponding cell in the range 04 to 039).
    b. "Check for Duplicated Patients":
        i. Any "errors" must be corrected. These are patients that match exactly on name, date of birth and medical record number. Review any duplicated records, identify the most complete one (or combine information), and delete the data for the remaining records for that patient. When you have done this for all sets of duplicated records, use the Delete Empty Rows button on the Patient Data Template worksheet to eliminate the gaps resulting from deletion.
        ii. Any "warnings" should be reviewed. These are patients who match on all but one field for first name, middle initial, last name, date of birth and medical record number. The

most common situations are two or more patients with the same name but different medical record numbers and patients who are identical except for spelling of some portion of their name. Both of these most likely represent true duplicates and, if so, should be addressed as per the above instructions for errors.

c. "Check for Other Errors," which may identify problems on one or more of these sheets:
    i. Preliminary Information: Make sure that you have selected the name of your organization from the drop-down list and have entered the name and work email address for the person submitting the data (primary contact for review) and the person who has reviewed and approved the submission ("authorized approver" as identified and provided previously to the AIDS Institute). Also check that your answer for "Include Frailty?" matches the data you have entered (or not) for this indicator.
    ii. QI Tools: Make sure that you have made an explicit selection of "YES" or "NO" for each of the nine QI tools (do not leave blank to represent "NO").
    iii. Statements:
        1. Make sure that you have entered a response for each of the statement fields (Methodology, Analysis and Key Findings, and Consumer Involvement).
        2. <u>If you are using the optional frailty screen indicator, please include language in the Methodology statement about how patients were selected for screening and which screening tool(s) was/were used.</u>
        3. At least one QI project is required, and for each QI project that is entered please check the following:
            a. Indicator has been selected from the drop-down list.
            b. The goal for this indicator in 2025 has been specified using an integer value (e.g., "90" to represent a rate of 90% in 2025). This rate should be equal to or, preferably, higher than the rate for 2024 and reflect the goal for the entire eligible population (e.g., all established active patients), not just those who will be receiving a QI intervention.
            c. You have entered a description of the quality improvement project(s) to achieve this goal including some specifics on the activities and the patient groups that will be included. Goals for specific subpopulations can be entered here.
    iv. Control Panel: Make sure that you have entered an explanatory comment for any field where one or more patient data warnings were identified.

3. Review your patient counts and indicator results for signs of possible data scoring errors or omissions.
    a. Are any of the indicator rates exactly 0% or 100%? If so, could this reflect a data coding error?
    b. Are any of the rates much lower or higher than you would expect? If so, can you discern the reason for the difference? If the difference is real, please explain in your Key Findings.
    c. Are the average and median times to antiretroviral initiation and viral load suppression among newly diagnosed patients about what you would expect? If not, could there be a problem with any of the related date fields (diagnosis date, antiretroviral initiation date and first suppressed viral load)?

d. In areas where other reporting (internal quality reports, Ryan White extracts, etc.) indicates that your outcomes have changed, do you see something similar reflected in these data?
e. Are the number of established active patients by clinic and demographic category about what you would expect? If not, could this reflect a data coding error?
f. Are the outcomes among these groups about what you would expect? If not, can you determine the reason for the unexpected results? If not a coding issue, please explain in Key Findings.
g. Do you have a mix of internally and externally diagnosed patients, or is it just one or the other? If all patients are reported as internally diagnosed, are you capturing the original diagnosis date for all patients (as intended) or the time when a subsequent confirmatory test was performed?
h. Do the relative number of newly diagnosed, other new to care and established in care patients seem right to you? If not, could some patients have been misclassified (e.g., other new to care patients reported as newly diagnosed)?
i. Are your caseloads by our various categories (newly diagnosed, other new to care, established in care, "excused," and unknown) similar to those for the previous review? If not, do you know of a reason for the change?
j. Is the denominator for "open patients" significantly larger than that for "established active patients"? If not, are you including all of the patients seen within your organization but not for HIV-specific care?
k. Do the service line counts seem right to you and consistent with previous reviews? If not, do you know what may have changed?

4. Review your statements for completeness and appropriate content.
   a. Do any of your statements include mention of specific patients, peer workers, etc.? This is mostly to occur in the Consumer Involvement section but should be checked generally, and any such references should be removed.
   b. Does your Methodology statement provide sufficient detail that people without access to your medical system can understand how you obtained, processed and reviewed the data? Does it address any limitations to your data and your decisions about how to address these?
   c. Does your Key Findings statement compare results for 2024 to those for 2023 and highlight areas of significant change? Do you analyze the changes and areas of lower than desired performance by specific patient subpopulations (i.e., were the results driven by outcomes for certain patient groups)?
   d. Do your QI projects set ambitious but reasonable goals? Do the descriptions for the projects include a timeline and relate how activities will be tailored to the needs of particular patient subpopulations?
   e. Does your Consumer Involvement statement convey both what has been done to involve consumers in QI and your plans to involve them in the future?
   f. Have you provided information about data warnings that will allow the AIDS Institute to assess the completeness and accuracy of your data? These statements should not reference particular patients but rather describe categorical problems such as reasons for missing demographic information or lack of access to medical record systems outside the HIV clinic.

File Naming Conventions

The submission template is distributed with a name such as "QOC Cascade Template_7.00 [or higher] – PRODUCTION [Update Date]." When your completed template is ready for submission, rename the file by prefacing this with your organization's name in caps along with the submission date, and then save it. (If the file name is too long, you can delete "PRODUCTION…" as in the example below.)

Example:

GREATER_NYC_HEALTHCARE_2025-07-01_QOC Cascade Template_7.00

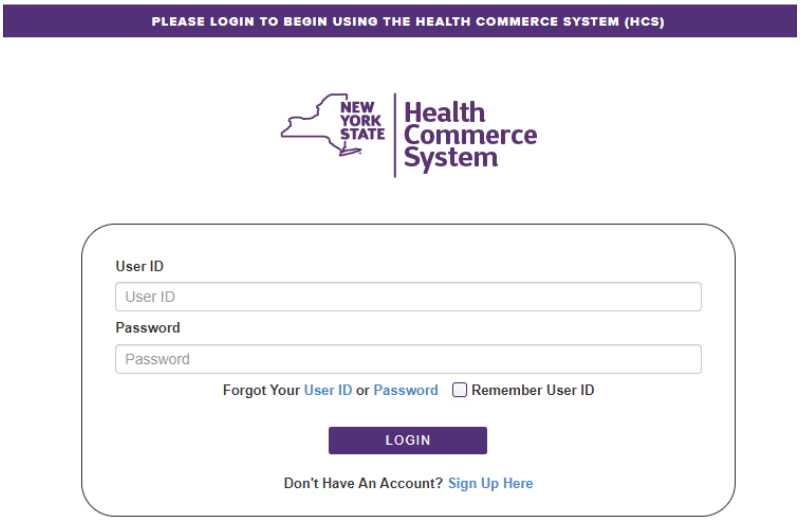
If you have questions about this, please reach out to us at qocreviews@health.ny.gov WITHOUT attaching the template to the correspondence.

Your template is now ready to be uploaded to the Health Commerce System.

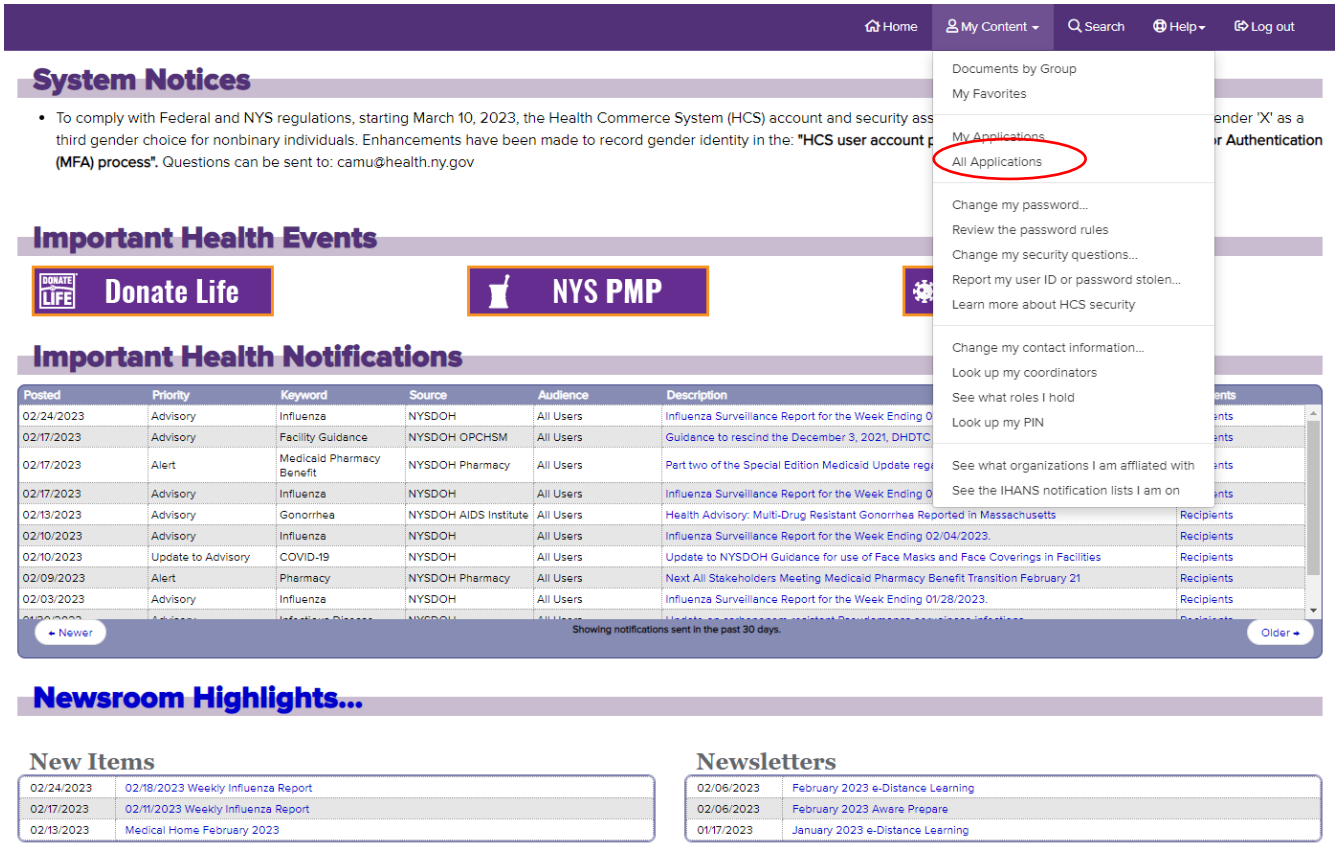
[Instructions continue on the next page.]

How to Upload the Template to the Health Commerce System[2]

Step 1: Log into the Health Commerce System (https://commerce.health.state.ny.us/) with your user ID and password. **Please note that your User ID should be all lowercase characters to ensure proper functionality in subsequent steps**.

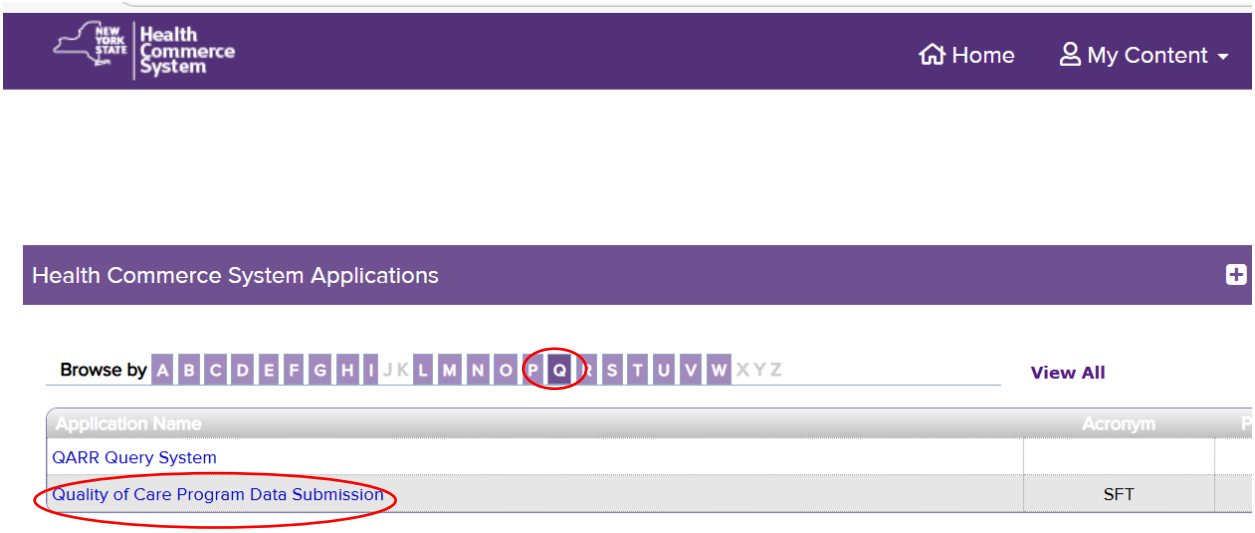


Step 2: Go to "All Applications" listed under the "My Content" tab.

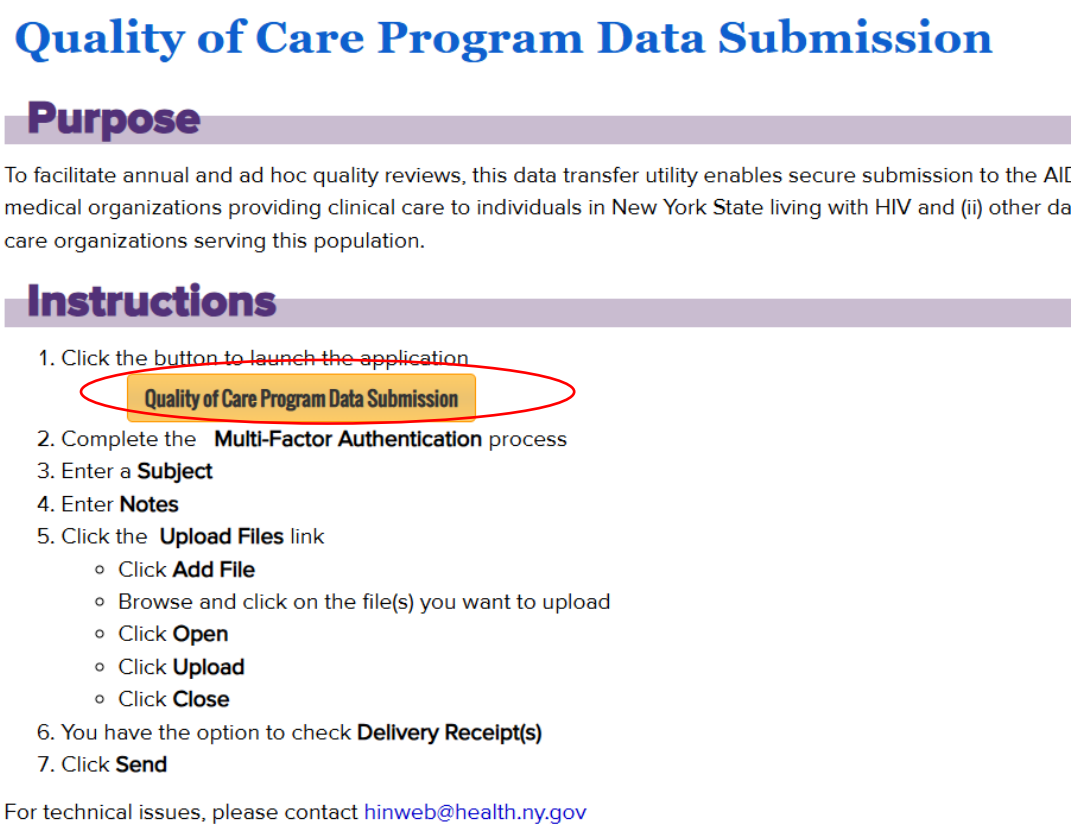


[2] See Appendix 4 for more information about Health Commerce System policies and contact information for support.

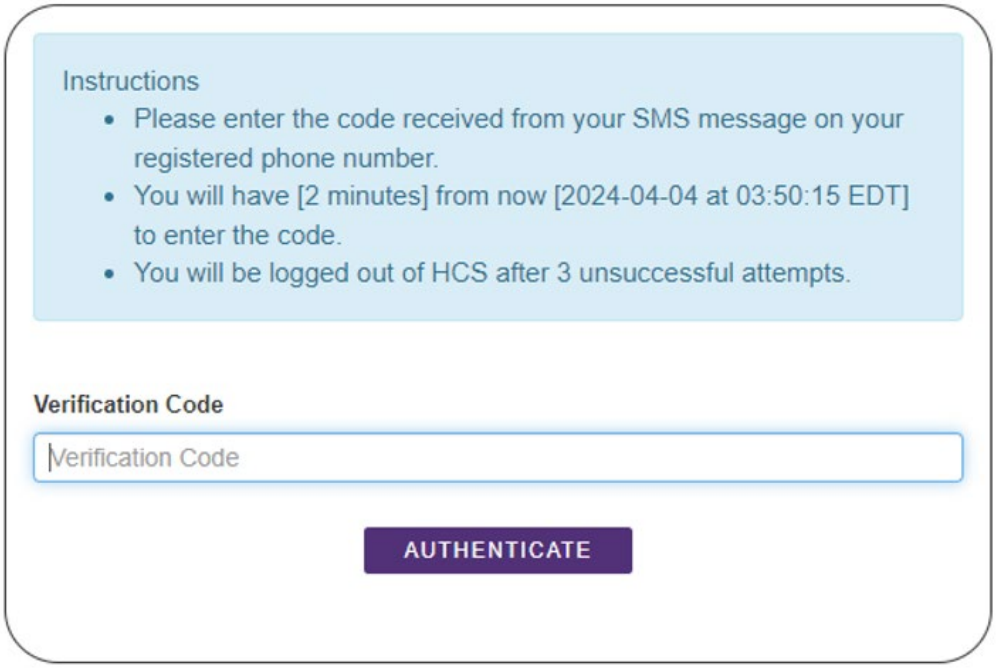
Step 3: Click on the letter “Q” and then “Quality of Care Program Data Submission.”



Step 4: Click the button labeled “Quality of Care Program Data Submission.”



Step 5: Complete the multifactor authentication process.



Please note that this needs to be completed very quickly (within 2 minutes) so it will be important to have on hand the device where you will receive the text that contains the authentication code.

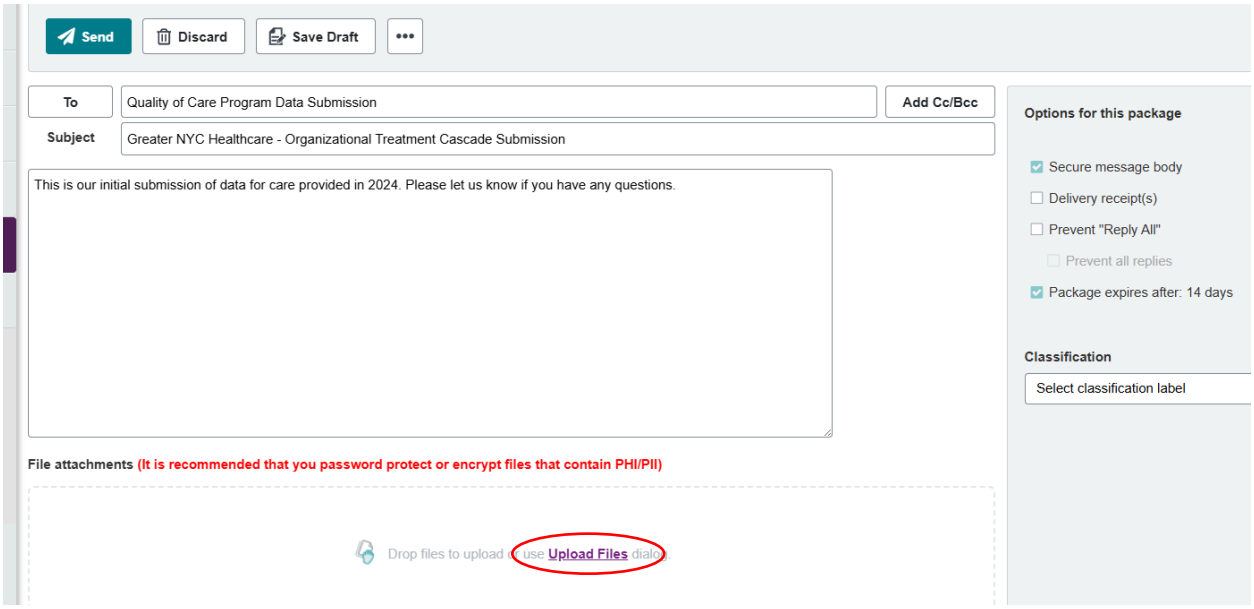
Updated Health Commerce System Policy (3/13/2025): "If you are using a non-shared device, you can select the option to remember your device when being challenged for your MFA code. You will not be challenged for MFA for 30 days and will receive an email to indicate your selection. Please note if you clear your internet browser cookies and history, or use a different browser, the next time you access an application with MFA you will be challenged for an MFA code." The Quality of Care Program recommends that you **do not** use this option unless you are certain that nobody else will use your computer or laptop.

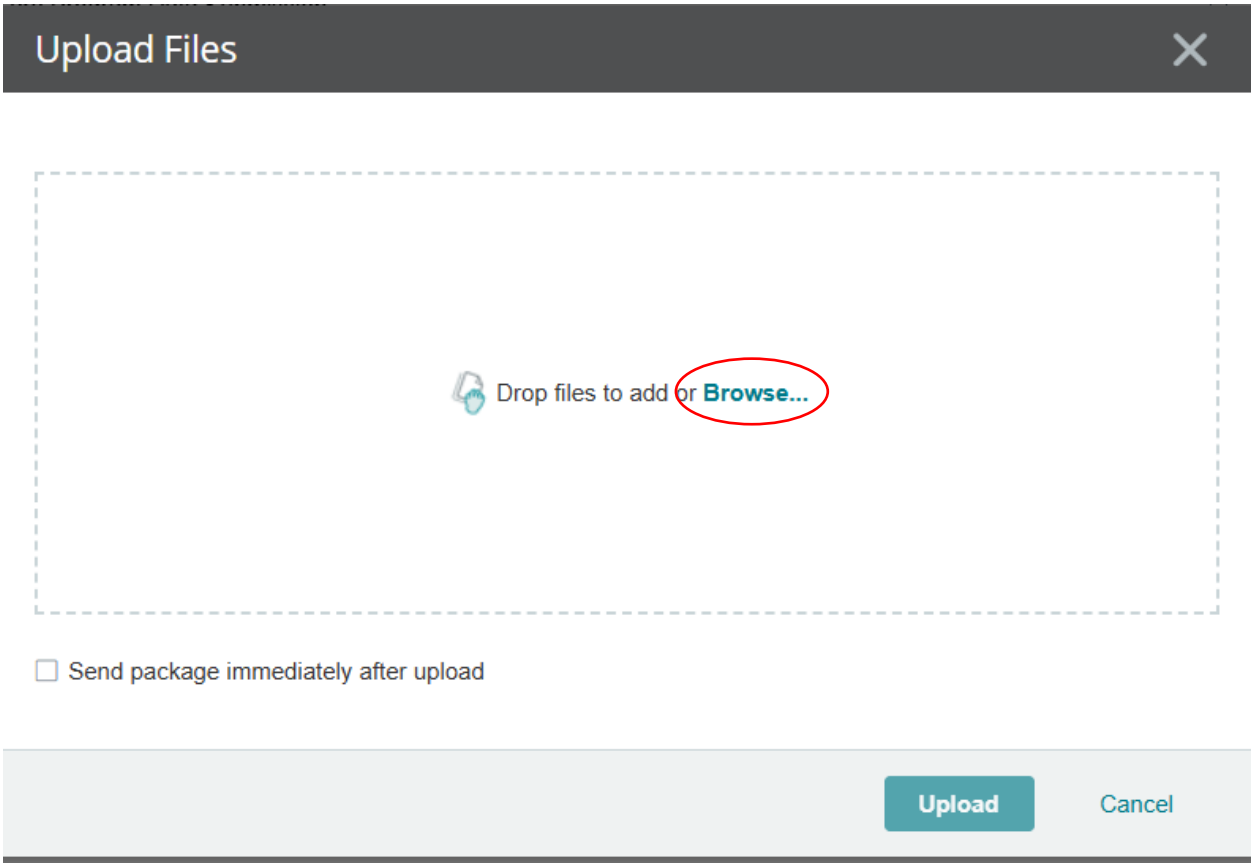
Step 6: Fill in the "Subject" heading with the name of your organization and the quality initiative for which you are submitting (i.e., Annual Organizational Cascade Review).

Step 7: Enter a message in the free-text box. This is required before clicking the "Send" button. You can enter comments for our attention here (**do not include any protected health information**) or simply specify the review period (e.g., "This is our submission for the review of care provided in 2024.").

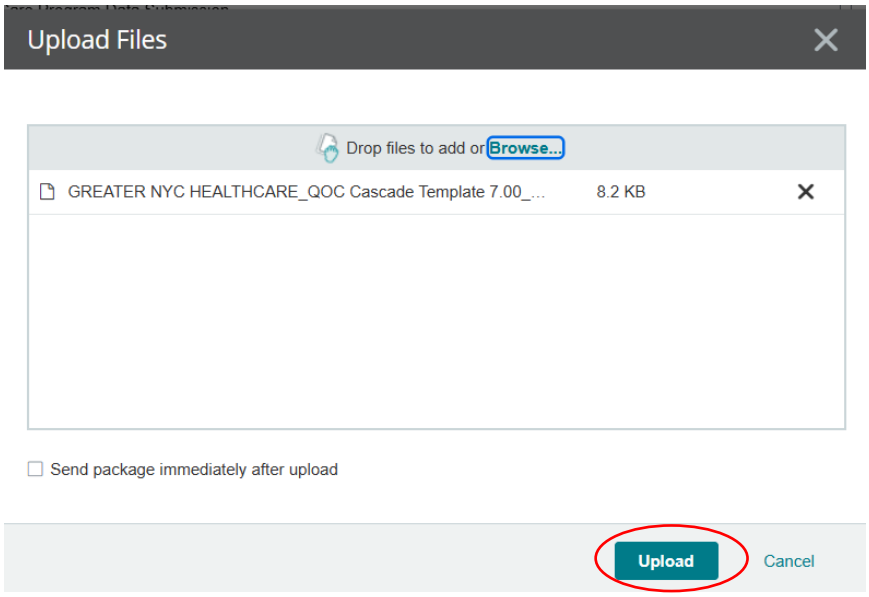
[Instructions continue on next page.]

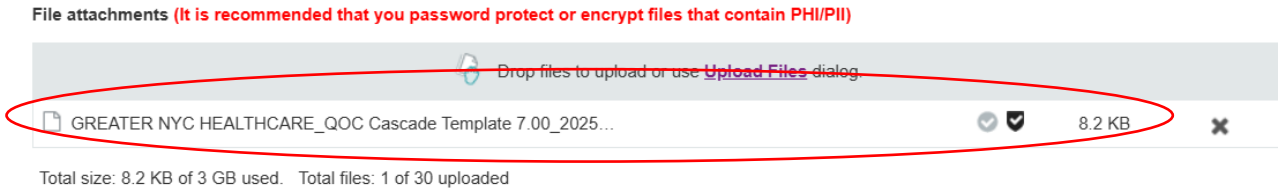
Step 8: Click “Upload Files,” then click “Browse” to select the data file from storage.





Step 9: Click “Upload” once the template file has been chosen, and then “Close.” The title of the Excel file will appear in the file attachments section with two checkmarks when it has been successfully uploaded. This just indicates the file has been attached; **you must proceed through Step 11 to submit the file to the AIDS Institute**. (When submitting organizational treatment cascade data, the template is already password protected so no additional password or encryption is needed.)

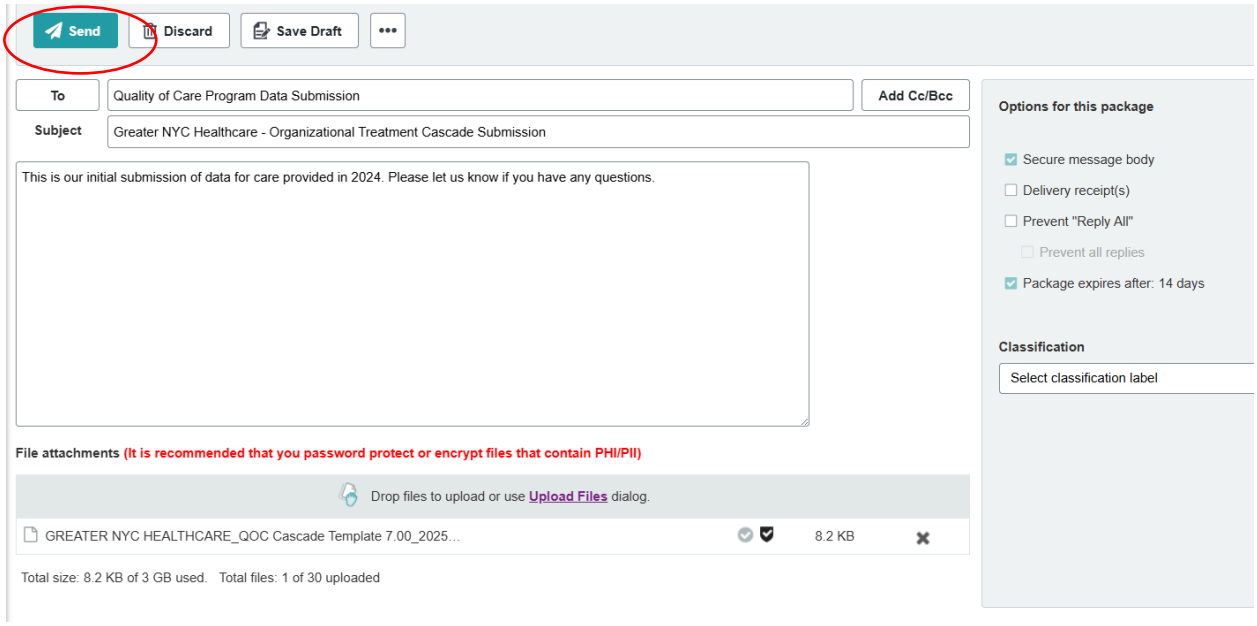




Step 10: Make sure that the addressee (To line) has not been changed; see screenshot for Steps 8 and 11. DO NOT include other addresses on the To, CC or BCC lines as this will allow others to download your submission. If you want, it is permissible to check the Delivery Receipt box on the right side of the screen.

[Instructions continue on next page.]

Step 11: Click the “Send” button at the top to officially submit your template via the Health Commerce System.



Please note that the submission will need to be downloaded to a secure DOH data server and processed by the QOC Review team before you receive confirmation of your submission; this may take a few days, depending on the volume of submissions. When your submission has been processed, an email will be sent to the “submitter” with a copy to the “authorized approver” and the Quality Coach for your organization. This email will provide the status of the data validation process. If any errors are detected, a detailed list will be provided, and you will be asked to correct them and resubmit the template. Successful submissions will be incorporated into an analytical database on the data server.

After automated data validation has been successful, your submission will be qualitatively reviewed by your organization’s Quality Coach and the Data Analyst before final approval by the Quality of Care Program. You may be asked to resubmit your template to address any concerns raised during these reviews. Please feel free to reach out to your Coach to discuss the status of your submission.

Appendixes

Appendix 1: Patient-Level Data Elements

Patient Information	Variable Name	Applies To	Field Type	Allowed Values	Guidance
First name	first_name	All patients	Text	Up to 50 characters	For transgender patients or others who have changed their first name, enter just the patient's current name (nothing in parenthesis, etc.).
Last name	last_name	All patients	Text	Up to 80 characters	For any patients who have changed their name, enter just the current name. For married patients or anyone else who uses two last names, enter their current legal name if known.
Middle initial	middle_initial	All patients	Text	Single character	Recommended for full deduplication of patient list but can be blank if needed.
Date of birth	dob	All patients	Date	*m/*d/yyyy	
Medical record number	mrn	All patients	Text	Up to 50 characters	Optional
Zip Code	zip	All patients	Text	5 numerical characters entered as text	Mark 'UK' if unknown or 'NA' if not applicable (i.e., a patient who has never been domiciled in the United States).
Sex at birth	birth_sex	All patients	Single selection	F (= female), I (= intersex), M (= male), UK (= unknown)	Mark 'UK' if unknown, but sex at birth and current gender cannot both be unknown.
Current gender	gender	All patients	Single selection	F (= female), M (= male), TGM (= transgender man), TGW (= transgender woman), X (= gender X), OTH (= transgender other, non-binary, gender non-conforming, other), UK (= unknown)	Mark 'UK' if unknown, but sex at birth and current gender cannot both be unknown.
Ethnicity	ethnicity	All patients	Single selection	H (= Hispanic or Latino/Latina), NH (= non-Hispanic/Latino/Latina), UK (= unknown)	Mark 'UK' if unknown.
Hispanic subgroup	hispanic_subgroup	Hispanic patients	Multiple selection (as needed, comma separated)	CA (= Central American), CU (= Cuban), D (= Dominican), M (= Mexican, Mexican American or Chicano/Chicana), PR (= Puerto Rican), SA (= South American), SP (= Spanish), OH (= other Hispanic, Latino/Latina, Spanish Origin), UK (= unknown), NA (= not applicable as patient is not Hispanic)	Mark 'NA' if patient is not Hispanic, 'UK' if unknown.
Race	race	All patients	Multiple selection (as needed, comma separated)	ASIAN, AIAN (= American Indian or Alaska Native), B (= Black or African American), , NHPI (= Native Hawaiian or Pacific Islander), W (= White), UK (= unknown)	Mark 'UK' if unknown (warning issued if 'UK' and *enrollment* = ACTNEW or ACTEST).
Asian subgroup	asian_subgroup	Asian patients	Multiple selection (as needed,	AI (= Asian Indian), BAN (= Bangladeshi), BUR (= Burmese), CAM (= Cambodian), CHI (= Chinese), FIL (= Filipino), HM (= Hmong), IND (= Indonesian), JP (= Japanese), KOR (=	Mark 'NA' if patient is not Asian, 'UK' if unknown.

			comma separated)	Korean), LAO (= Laotian), MAL (= Malaysian), NEP (= Nepalese), PK (= Pakistani), SL (= Sri Lankan), TA (= Taiwanese), TH (= Thai), TI (= Tibetan), V (= Vietnamese), OA (= other Asian), UK (= unknown), NA (= not applicable)	
NHPI subgroup	nhpi_subgroup	Native Hawaiian / Pacific Islander patients	Multiple selection (as needed, comma separated)	F (= Fijian), G (= Guamanian), H (= Hawaiian), S (= Samoan), T (= Tongan), OPI (= other Pacific Islander), UK (= unknown), NA (= not applicable)	Mark 'NA' if patient is not Native Hawaiian or Pacific Islander, 'UK' if unknown.
Primary language	language	All patients	Single selection	ARABIC, BENGALI, BURMESE, CHINESE, CREOLE (= Haitian Creole), ENGLISH, FRENCH, HINDI, ITALIAN, JAPANESE, KOREAN, NEPALI, POLISH, RUSSIAN, SPANISH, URDU, YIDDISH, OTH (= other language), UK (= unknown)	Primary language spoken at patient's home, if known. Enter 'UK' if unknown.
Other language specification	other_language_ specify	Patients who speak a language not on list	Text	Up to 50 characters	Enter language name or description for patients whose primary language spoken at home is not one of choices for Primary Language. Leave blank if not applicable.
Housing status	housing	All patients	Single selection	S (= stable / permanent), T (= temporary), US (= unstable), UK (= unknown)	Mark 'UK' if unknown.
HIV exposure risk	hiv_risk	All patients	Multiple selection (as needed, comma separated)	BLOOD (= blood transfusion/blood products), HEMO (= hemophilia/coagulation disorder), HETERO (= heterosexual contact), IDU (= injecting drug use, MSM (= male who has sex with male(s)), PERI (= perinatal transmission), OTH (= other), UK (= unknown)	Patient's HIV exposure risk factor(s); mark 'UK' if unknown (warning issued if 'UK' and *enrollment* = ACTNEW or ACTEST). **Please note**: this field is for reporting, using established categories, of the most likely way(s) the patient was exposed to HIV at the time of infection and is not necessarily intended to reflect the patient's current gender identity or recent substance use history. Provider judgment, in conjunction with patient input, should be used as necessary to determine which option(s) to use for this and related fields.
Insurance	insurance	All patients	Single selection	ADAP (= AIDS Drug Assistance Program (Primary Care)), DUALELG (= Medicaid & Medicare), MEDICAID, MEDICARE, PRIVATE (= individual or employer-based private insurance), VA (= Veteran's Administration), OP (= other plan), NONE, UK (= unknown)	Primary insurance on last status check during the review period; mark 'UK' if unknown (warning issued if 'UK' and *enrollment* = ACTNEW or ACTEST).
Medicaid number	medicaid_number	Patients whose primary insurance is Medicaid	Text	Eight characters in this sequence: two letters, five numbers, and one letter. See guidance in next column for other options.	Also applies to dual-eligible patients (those also covered through Medicare). Mark 'NA' for patients with other primary insurance, 'NS' if number is in a non-standard format and the 8-character CIN cannot be extracted, 'UK' if unknown.
Enrollment status (as of the end of the review period, was the patient established in care, new to care,	enrollment	All patients	Single selection	ACTEST (= active, seen prior to the review period, continuing in program), ACTNEW (= active, new to clinic during review period or returning after not being seen the previous two years, continuing in program), DEC (= died during review period), EXTCARE (=	For ACTEST, the patient must (1) have had during the two years immediately prior to the review period at least one HIV medical care visit at your clinic or at least one viral load test performed within or reported to your organization; and (2) have had at least one HIV medical care visit at your clinic during the review period; and (3) not be analytically excludable

deceased, incarcerated, relocated, in external care, or other?)				confirmed to be receiving ongoing HIV care at another site as of end of the review period), INC (= incarcerated as of end of review period), RELOC (= relocated out of New York State during the review period), OTH (= other status, not enrolled in care at your organization)	due to death during the review period or incarceration, relocation outside of NYS or ongoing external HIV care within NYS as of the end of the review period. For ACTNEW, the patient must (1) have NOT had during the two years immediately prior to the review period any HIV medical care visits at your clinic nor any viral load tests performed within or reported to your organization; and (2) have had at least one HIV medical care visit at your clinic during the review period; and (3) not be analytically excludable due to death during the review period or incarceration, relocation outside of NYS or ongoing external HIV care within NYS as of the end of the review period. Patients who died during the review period, relocated outside of NYS during the review period or who were receiving ongoing external HIV care or were incarcerated as of the end of the review period should be included in the reported data but will be excluded from most indicator scoring. These patients should be classified as DEC, RELOC, EXTCARE or INC, respectively. All other patients should be entered as 'OTH' (other status).
Clinic (where was the patient enrolled in care?)	clinic_code	New or established active patients	Single selection	Must match one of the clinic codes we have defined for your organization.	If seen at multiple sites, location where seen most often or, if tied, where seen last. Leave blank if not applicable (*enrollment* does not equal ACTEST or ACTNEW).
Service line (where was the patient seen within your system?)	service_line	Unknown-status patients (enrollment = 'OTH')	Multiple selection (as needed, comma separated)	DS (= dental services), ED (= emergency department/urgent care), FACHIV (= faculty practice HIV care outside HIV clinic(s)), IP (= inpatient care, including ICU, surgery and psychiatric care), MBHS (= outpatient mental and behavioral health services), NHSC (= non-HIV specialty care such as cardiology, pulmonology, neurology, ambulatory surgery, etc.), PC (= primary care provided outside of your HIV clinic(s)), RHS (= reproductive health services), SS (= supportive services), OTH (= other)	Leave blank if not applicable. Include all applicable services, but only list each one once. For example, a patient with one inpatient stay, two dental appointments and three visits to the emergency department should be listed as "IP, DS, ED", not "IP, DS, DS, ED, ED, ED".
Service line specifics	other_service_ specify	Patient seen on "other" service	Text	Up to 200 characters	Enter a brief description of any service line that does not match one of the predefined categories. Leave blank if not applicable.
Diagnosis status (when was the patient diagnosed, and if during the review period, where?)	diagnosis	All patients	Single selection	NEWEXT (= externally diagnosed during the review period), NEWINT (= internally diagnosed during the review period), PREV (= diagnosed prior to the review period), UK (= unknown)	Mark 'UK' if unknown.

Was the patient on ARV (besides PrEP or PEP) during review period?	arv	All patients	Single selection	NO, YES, UK (= unknown)	For "YES": At least one prescription for ARV therapy, concurrent with or following diagnosis and during the review period, from any provider (within your medical organization or outside).
Was a VL test obtained during the review period?	vl_test_review_year	All patients	Single selection	NO, YES, UK (= unknown)	Mark 'UK' if unknown. Must be on or after diagnosis date for newly diagnosed patients (see related fields below).
Diagnosis date	diagnosis_date	Newly diagnosed patients	Date	*m/*d/yyyy	Enter 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 For externally diagnosed patients, this date should be when the external provider made the initial diagnosis (as specified above) if that can be determined. If necessary, this can be estimated using the assumed date of the first positive test.
Resistance test (among newly diagnosed patients enrolled in HIV care)	resistance_test	Newly diagnosed patients	Single selection	NO, YES, UK (= unknown), NA (= not applicable)	Qualifying events include a resistance test performed within your organization or documentation of an external test performed during the review period. Mark 'NA' if patient is not enrolled in care (*enrollment* does not equal 'ACTNEW') or was previously diagnosed.
Was the patient seen for HIV care during review period?	hiv_clinic_visit	Newly diagnosed patients	Single selection	NO, YES, UK (= unknown), NA (= not applicable)	Qualifying events include an HIV medical care visit at your clinic or at an external provider following your referral for external care. Mark 'UK' if unknown, 'NA' if patient was previously diagnosed.
If yes, date of first visit with an HIV provider	hiv_clinic_visit_date	Newly diagnosed patients	Date	*m/*d/yyyy	Enter the earliest available date on or after diagnosis date and during the review period when either of these events occurred: (i) First HIV medical care visit at one of your clinics (ii) First HIV medical care visit at another medical organization following your referral for external care Date cannot be before the diagnosis date. Leave blank if diagnosis status is unknown or previously diagnosed or if the patient was not seen for HIV care during the review period.
Date of ARV initiation	arv_initiation_date	Newly diagnosed patients	Date	*m/*d/yyyy	Enter the date of the first known ARV prescription during the review period (other than PEP) that was not prior to date of diagnosis or first visit within your medical *organization* (can be before first visit to HIV clinic).

					Date cannot be before the diagnosis date. Leave blank if diagnosis status is unknown or previously diagnosed or if the patient was not prescribed ARV therapy during the review period.
Was a suppressed viral load obtained during the review period?	suppressed_ever_review_year	Newly diagnosed patients	Single selection	NO, YES, UK (= unknown), NA (= not applicable)	Mark 'UK' if unknown, 'NA' if patient was previously diagnosed or not tested. For 'YES', at least one suppressed viral load must have occurred on or after diagnosis date and by end of the review period (see related fields below).
Date of first VL test during review period	first_vl_date_newly_dx	Newly diagnosed patients	Date	*m/*d/yyyy	Enter the earliest available documented date, not prior to date of diagnosis or first visit within your medical *organization* (can be before first visit to HIV clinic), when a viral load test result was reported. Date cannot be before the diagnosis date. Leave blank if diagnosis status is unknown or previously diagnosed.
Date of first suppressed VL	first_suppressed_date_newly_dx	Newly diagnosed patients	Date	*m/*d/yyyy	Enter the earliest available documented date, not prior to date of diagnosis or first visit within your medical organization, when a viral load test result of less than 200 copies/mL (or "undetectable" based on a test with a threshold of sensitivity less than 200 copies/mL) was reported. Date cannot be before the date of first VL test. Leave blank if a suppressed viral load was not obtained during the review period.
Was the patient suppressed on final VL test during the review period?	suppressed_final_review_year	Previously diagnosed patients	Single selection	NO, YES, UK (= unknown), NA (= not applicable as the patient was newly diagnosed or not tested during the review period)	Mark 'UK' if unknown, 'NA' if patient is newly diagnosed or was not tested.
Was a frailty screen performed during the review period?	frailty_screen	Older patients	Single selection	LISTED (screened using tool in list), OTHER (screened using another tool), NONE (patient not screened), NA (patient not eligible), UK (eligible but unknown if screened)	Optional indicator for 2024 Review. If using, eligibility is defined by being at least 51 years old as of end of review period for "established active" patients or at least 61 years old as of end of review period for "other new to care" patients or newly diagnosed patients who were enrolled in care. (Patients not enrolled in care are not eligible for the indicator.) Recommended screens are (i) FRAIL Questionnaire, (ii) Gerontopole Frailty Screening Tool, (iii) Dalhousie Clinical Frailty Scale, and (iv) Frailty Index (Accumulation of Deficits).

Appendix 2: Recommended Frailty Screens

While there are many tools for frailty screening, we have selected four validated instruments for inclusion as recommended screens in the piloting of this indicator. We recognize that other screens may be effective and would encourage you to submit data even if you do not use one of the ones we have listed. As described in the preceding instructions, we will assess rates for both recommended screening and any screening among eligible patients (established active patients who were at least 51 years old by the end of the review period and new-to-care patients who were at least 61 years old by the end of the review period).

FRAIL Questionnaire

- Fatigue: Are you fatigued?
- Resistance: Cannot walk up 1 flight of stairs?
- Aerobic: Cannot walk 1 block?
- Illnesses: Do you have more than 5 illnesses?
- Weight Loss: Have you lost more than 5% of your weight in the past 6 months?

3 or Greater = Frailty
1 or 2 = Prefrail

Reference: Morley et al. Journal of Nutrition, Health and Aging. 2012 Jul;16(7):601-8. PMID: 22836700 PMC4515112

Gérontopôle Frailty Screening Tool

- Living alone?
- Involuntary weight loss in the past 3 months?
- Fatiguability from the past 3 months?
- Mobility difficulties for the past 3 months?
- Memory complaints?
- Slow gait speed (> 4 seconds for 4 meters)

Frailty = At least one, plus “gestalt” assessment

Reference: Subra et al. Journal of Nutrition, Health and Aging. 2012 doi: 10.1007/s12603-012-0391-7.

[Appendix continues on the next page.]

Top Tips to help you use the Clinical Frailty Scale

The Clinical Frailty Scale (CFS) was designed to summarise the results of a Comprehensive Geriatric Assessment. It's now commonly being used as a triage tool to make important clinical decisions, so it is imperative that it is used correctly.

#1 It's all about the baseline
If the person you are assessing is acutely unwell, score how they were 2 weeks ago, not how they are today.

#2 You must take a proper history
The CFS is an objective clinical assessment tool. Frailty must be sensed, described, and measured - not guessed.

#3 Trust, but verify
What the person you are assessing says is important, but should be cross-referenced with family/carers. **The CFS is a judgement-based tool**, so you must integrate what you are told, what you observe, and what your professional clinical experience tells you from dealing with older adults

#4 Over-65s only
The CFS is not validated in people under 65 years of age, or those with stable single-system disabilities. However, documenting how the person moves, functions, and has felt about their health may help to create an individualised frailty assessment.

#5 Terminally ill (CFS 9)
For people who appear very close to death, the current state (i.e. that they are dying) trumps the baseline state.

#6 Having medical problems does not automatically increase the score to CFS 3
A person who isn't bothered by symptoms and whose condition(s) doesn't limit their lives can be CFS 1 or 2 if they're active and independent.

#7 Don't forget "vulnerable" (CFS 4)
People in this category are not dependent (though they may need assistance with heavy housework), but often complain of "slowing down". They're becoming sedentary, with poor symptom control.

#8 Dementia doesn't limit use of the CFS
Decline in function in people living with dementia follows a pattern similar to frailty: mild, moderate and severe dementia generally map to CFS 5, 6 and 7 respectively. If you don't know the stage of dementia, follow the standard CFS scoring.

#9 Drill down into changes in function
When considering more complex activities of daily living (such as cooking, managing finances, and running the home) the focus is on *change* in function. A person who has always relied on someone else to perform a particular activity should not be considered dependent for that activity if they've never had to do it before and may not know how.

Kenneth Rockwood, Sherri Fay, Olga Theou & Linda Dykes
v2.0 5 June 2020

Reference: Rockwood K, Theou O. "Using the Clinical Frailty Scale in allocating scarce health care resources." Canadian Geriatrics Journal. 2020;23:254-259.

Frailty Index (Accumulation of Deficits)

Scored as a percentage positive of a list of deficits. Only feasible if it can be programmed into the electronic health record system. See online reference for additional details.

Reference: https://journals.plos.org/plosone/article?id=10.1371/journal.pone.0201394

[Appendixes continue on next page.]

Appendix 3: Resources for Information on Out-of-Care Patients

Medical organizations participating in the treatment cascade reviews are encouraged to make use of the New York City and New York State HIV surveillance systems to obtain additional information on patients who may be lost to follow up.

New York City: Providers can browse to this website for the City's HIV Care Status Report System, https://nyc.gov/site/doh/health/health-topics/aids-hiv-care-status-reports-system.page, and follow the instructions there. The website provides various pdfs related to standard requests and contact information for urgent requests. A medical license number will be required.

New York State: Providers with a Health Commerce System account can log into that website, https://commerce.health.state.ny.us, and browse to the HIV/AIDS Provider Portal: My Content -> All Applications -> H -> HIV/AIDS Provider Portal. Users with a medical license number will see a link for "Out of Care Inquiry," and clicking on that should provide instructions for how to do so. If there are any questions or problems, providers can reach out to the Bureau of HIV / AIDS Epidemiology (BHAE) at 518-474-4284 or via email at eprfhelp@health.ny.gov.

[Appendixes continue on next page.]

Appendix 4: Health Commerce System Policies & Procedures

Login Page for Health Commerce System: https://commerce.health.state.ny.us

Contact Information for Commerce Accounts Management Unit (CAMU)

Phone number: 866-529-1890

Fax number: 518-486-2249

Email: camusupp@health.ny.gov

Mail:

New York State Department of Health
Commerce Accounts Management Unit (CAMU) Supervisors
800 North Pearl Street, Room 214
Albany, NY 12204-1899

Multi-Factor Authentication – Governor's Office Communication, 8/16/23

Effective August 23, 2023, the Health Commerce System implemented Multi-Factor Authentication (MFA) functionality for the secure file transfer functionality in the Health Commerce System (HCS). Multi-Factor Authentication adds an additional layer of security to the application to ensure security and compliance. All users are required to use MFA to access the Quality of Care Program's data upload application in the HCS. Users who have not already done so are strongly encouraged to set up MFA as soon as possible to ensure continuity of access.

Users **with** a New York State driver's license or non-driver photo ID can set up their own MFA:

- Click My Content on the top navigation bar and select "All Applications."
- Click the "M" tab, then "MFA Enrollment" and complete the required fields.
- Step-by-step directions can be found here: https://bit.ly/userMFA

Users **without** a New York State driver's license or non-driver photo ID must have their MFA set up by their HCS Coordinator using the Coordinator's Update Tool. HCS Coordinators without a New York State driver's license or non-driver photo ID must have their MFA completed by a different HCS Coordinator at their organization.

If you do not know your HCS Coordinator or if you need help adding new HCS Coordinators for your organization, contact the Commerce Accounts Management Unit (see above).

Network Requirements for Accessing Health Commerce System (HCS) – Governor's Office Communication, 8/22/23

This section is intended for network administrators, particularly firewall and proxy security administrators in organizations that need to access the Health Commerce System (HCS). It will help you configure your network to support the secure connection to the HCS. It primarily focuses on the network requirements of accessing HCS from Internet browser via HTTPS. Most organizations deploy an internet firewall, or internet proxy and

firewall, to restrict and control the HTTP based traffic that leaves and enters their network. Follow the firewall and proxy guidance below to enable access to the HCS from your network.

First try testing. The HCS User Acceptance Testing (UAT) website is accessible on the internet at https://uatcommerce.health.state.ny.us/. No need to login/authenticate. No further action needed If you can reach the login page of the UAT HCS website. If you are not able to reach the UAT HCS login page, continue below for guidance on ensuring network access for your users.

If you are using a firewall only, note that filtering HCS traffic using IP addresses is NOT recommended, as the IP addresses used by HCS are dynamic and may change at any time. The IP addresses also are not used exclusively by HCS but also by other customers of our service provider.

If your firewall supports URL filtering, configure the firewall to allow the HCS destination URLs listed below. An * shown at the beginning of a URL (e.g., *.health.ny.gov) indicates that services in the top-level domain and all subdomains must be accessible, which will also help to ensure that users in your organization can access other DOH systems in addition to HCS.

*.health.ny.gov
*.health.state.ny.us

If your firewall does not support URL filtering and must use IP filtering, configure the firewall to allow the HCS destination IPs listed here, but please notice that the IP addresses used by HCS are dynamic and may change at any time, therefore you need to continuously review and update your firewall accordingly.

https://commerce.health.state.ny.us/public/ipapp/

If you have any questions or issues, please contact hcsoutreach@health.ny.gov.

[Appendixes continue on next page.]

Appendix 5: Statistical Tests Provided on the Data Analysis Worksheet

Chi-square Tests

Data presented in the form of a frequency table are often analyzed for significant variation using a chi-square test. This is done in a series of steps:

1) The row and column totals are calculated for the table.
2) Using these totals, the number of results that would be expected for each cell if there were no correlation between the columns (i.e., that the number of results in the cell would equal the product of the percentage of values in that row and the percentage of values in that column) is calculated. For example, in Figure A1, the formula for cell D23 is "= (SUM(D21, E21)/SUM(D21:E22))*SUM(D21, D22)" (combining steps 1 and 2 and rearranging the order of the operands).
3) The chi-square statistic is then calculated by summing the squared differences of the observed and expected values divided by the number of expected. The squaring ensures that these values will be positive, and the larger the sum the greater the discrepancy from expectations if the outcome were not correlated with membership in the group under consideration. In this case, the formula for cell G23 is "=POWER(D21 - D23,2)/D23 + POWER(E21 - E23,2)/E23 + POWER(D22 - D24,2)/D24 + POWER(E22 - E24,2)/E24."
4) The probability of observing a value this large (or larger) by chance is then calculated by seeing where the value falls in the chi-square distribution. Excel has a built-in function for this, and the formula for cell H23 is "=CHISQ.DIST.RT(G23,1)." Half of the probability (in this case, the relatively small value of 0.03549361/2 = 0.017746807 or about 1.77%) is for a chi-square value at least this great due to an excess of "true" values, and the other half is for a chi-square value this great due to a deficit of "true" values. It is conventional to treat any (total) p value less than 0.05 as statistically significant, but this is an arbitrary threshold. It is perhaps better to think of this number as falling on a spectrum of confidence, especially when retrospectively reviewing data outside of a formal study design.

Figure A1: Chi-square Calculations

	A	B	C	D	E	F	G	H
17								
18			OUTCOME OF INTEREST	VLS				
19			POPULATION OF INTEREST	Hispanic				
20				Population	Other Patients		Run Chi-square Test	
21			Outcome = True	1820	4093			
22			Outcome = False	271	716		Chi square	P value
23			Expected True	1792	4121		4.4213	0.03549361
24			Expected False	299	688			

Logistic Regression

Regression analysis is process for quantifying the impact of one or more independent variables on an outcome of interest (the dependent variable). For instance, if one had access to data about blood pressure that included the age of each patient, it would be possible to plot a "regression line" for the expected pressure based on age. This line would be defined by a formula: Pressure = Intercept + (x * Age), where "x" is a coefficient that defines the slope of the line. Determining this formula entails finding a value for x that maximizes the "fit" of the line to the data points. This is typically done by minimizing the sum of the squared vertical distances between each of the points and the line.

While harder to visualize, this process can be extended mathematically to multiple dimensions. So, if one also had the sex and body mass index (BMI) of each patient, it would be possible to define a "best fit" formula for all three factors: Pressure = Intercept + (x * Age) + (y * Sex) + (z * BMI), where y and z are coefficients for Sex and BMI, and Sex could be coded as male = 0, female = 1, or vice versa.

The above are examples of linear regression. When the relationship between an independent variable and the outcome is non-linear, it may be possible to transform the data first by exponentiating each value (e.g., looking at blood pressure as a function of, among other things, the square root of BMI). However, when we want to predict the probability that something will occur, we are confronted with a more fundamental problem: the probability of an event can never be greater than 100%!

To address this, logistic regression estimates the natural log of the odds of an occurrence in terms of an intercept value and parameter estimates for various factors that may affect the likelihood of that occurrence. The odds of, for instance, viral load suppression can be calculated from this equation, where both sides of the initial regression equation have been exponentiated: Odds = $e^{(\alpha + B_1 \text{Age} + B_2 \text{Housing} + \ldots + B_N \text{Race})}$, where α is the intercept estimate and the various Bs are all of the parameter estimates for factors such as age, housing status, race, etc.

Since the odds of the suppression (continuing this example) are defined as the probability of suppression divided by the probability that the patient was not suppressed (i.e., 1 – probability of suppression), algebraic rearrangement yields the following equation for the probability of suppression: Probability = Odds / (Odds + 1).

Using these two equations allows for estimation of the probability of suppression for any patient. With this relationship defined, the parameters for the logistic regression equation are chosen by maximizing the (negative) value for the log of the "likelihood function." This function quantifies the probability that we would observe the values seen in the data, and maximizing it is analogous to the "least squares" fitting process described for linear regression.

Since the odds of suppression equal an expression in the form of $e^{(\alpha + B_1 X + B_2 Y + \ldots + B_N Z)}$, any parameters B_1, B_2, etc. that are greater than 0 increase the odds and, in turn, the probability of suppression. Conversely, parameters that are less than 0 decrease the odds and therefore the probability of suppression.

So, if the outcome is "good" (e.g., viral suppression), parameters that are positive are associated with a greater likelihood of a "good" outcome. However, it is important to view each parameter in relation to others, particularly where they are mutually exclusive. For instance, if the parameter for the influence of being on Medicaid is modestly positive, this is not really "good" if the other insurance options are also included and the parameter estimates for these are larger positive values.

It is also important to consider the statistical significance of these estimates. In other words, what is the probability of finding a result of this magnitude if the true coefficient value were zero. There are various ways to do this. The Excel template estimates these p values by calculating the Wald statistic for each coefficient.

These calculations are too complicated to explain in detail here. In short, this involves calculating the covariance-variance matrix for the intercept and all of the coefficients, taking the square root of the variances to find the standard error for each factor, dividing the coefficients by their standard errors, and then looking up a p value for this ratio from a table of chi-square distributed values. These estimates are more reliable when the number of patients is relatively large.

Even if the selected parameters are statistically significant, they may not explain much of the variation between patients who are likely to have the good outcome and those who are not. One measure of the degree to which the available information accounts for the differences in outcomes is the Gini coefficient. This metric, commonly used as a measure of economic inequity, can vary from 0 to 1 and measures how quickly the desired outcome accrues to the "haves" (in this case, patients with characteristics such as greater age that are associated with viral suppression, etc.) versus the "have nots." When considering the reported Gini coefficient, it is important to bear in mind that it is being calculated for the fitted data. It is likely that the value would be lower for a new, random sample of patients.

While "conventional" logistic regression is a powerful tool, more nuanced insights can be obtained from hierarchical logistic regression. In this process, individuals are treated as members of groups, and the parameter estimates can vary from group to group. The relevant analysis for the data in the template would be patients enrolled in separate clinics within the same organization. A full hierarchical analysis is not possible with the functionality built into the template, but it is possible to add clinics as an additional factor in the user-defined fields.

For a more robust analysis, the user of the template would do well to consider investigating the organization's data in dedicated statistical software. There are a variety of both commercial and open source programs available. There are also several statistical add-ins for Excel that may be of interest to the program's analytical staff. Please feel free to contact our own Data Analyst at qocreviews@health.ny.gov for suggested resources.

[Appendixes continue on next page.]

Appendix 6: Frequently Asked Questions

Template & Health Commerce System

1. Q: Will organizations be receiving a guidance document to accompany the Excel template?
   A: Yes, a guidance document (this one) will be distributed to all providers. It also contains 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 (in this document). 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 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: This 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 Health Commerce System use. However, if your organization is already registered you can see whoever manages that account at your site (your Health Commerce System Coordinator) to obtain access. Otherwise, you can contact the Health Commerce Accounts Management Unit directly at camusupp@health.ny.gov or by calling them at 866-529-1890.

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. Please see the data use policies described in this reference guide.

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 us via our group email account, qocreviews@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 is a specific application on the Health Commerce System site for uploading your data (see submission instructions in this document for details), but you only need to register for general access to Health Commerce System. To do so, you will need to contact your local Health Commerce System Coordinator. If you do not have a Coordinator, you can contact the Health Commerce Accounts Management Unit directly at camusupp@health.ny.gov or by calling them at 866-529-1890.

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 template use instructions in this document 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 quality improvement. Are there resources and/or technical assistance available for programs interested in using this function within the template?
    A: Step-by-step directions on how to use the PivotTable feature are included in the template use instructions within this guide.

15. Q: I would like to know the viral load suppression 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 are included with other results on the Control Panel sheet. Viral load suppression 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 viral load suppression calculation for all patients.

16. Q: Can you please summarize the differences between the 2023 performance review elements and this year's (2024) performance review?
    A: We have added a new optional indicator for frailty screening among older patients and have made improvements to the charts that are generated when you score your data.

17. Q: I understand that you have specified a list of four recommended frailty screens. However, what counts as "other screen" for frailty?
    A: We are taking a liberal approach to this as we pilot the indicator this year. If you conducted an assessment during the review period that you believe provided insight into the patient's frailty status then you can respond "OTHER" for eligible patients if it's not one of the four that we specify. In particular, use of the ICOPE screening tool for general assessment of aging related changes would qualify. However, routine medical care that's provided to patients of all ages, such as obtaining height and weight and calculating a BMI (body mass index), would not count as a frailty screen unless additional follow-up actions are taken.

18. 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 at the reporting organization.

19. Q: We have more than a thousand people with HIV 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.

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 patients on that sheet with those in the Patient Data Template sheet by medical record number.

21. Q: I am pasting the patient level data unto the QOC template. However, the instructions stated that the information should be pasted using the "Values (V)" option. Can you let me know where I can find this on the template?

A: After copying the text and selecting the target cell for pasting, 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 2025?
   A: Exclude this patient from the review (i.e., do not enter on spreadsheet) as they were not known to have HIV 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 2024 (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.

5. Q: Is 3-day linkage only for newly diagnosed patients or also other 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 viral load suppression with this date in mind. Antiretroviral prescription after diagnosis is also an acceptable linkage to care indication. Whichever comes first, the linkage to HIV care or antiretroviral prescription after HIV diagnosis, will be used for the linkage indicator for internally diagnosed patients. No linkage information is necessary for previously diagnosed patients even if they were new to the clinic in 2024.

6. Q: Aren't the numerators in the indicator scoring referring to active patients on antiretroviral therapy?
   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 to approximate the date, please do so. For instance, "HIV diagnosis in March" could be translated to a diagnosis date of 3/15/24 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, Asian and NHPI subgroup fields?
   A: Put 'NA' for the applicable patient subgroup if you don't know for sure if they are Hispanic, Asian or Native Hawaiian/Pacific Islander.

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 having HIV disease.

10. Q: We might not have up-to-date viral load 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. 2025. (Unable to enter that date on template without having an error.)
    A: If the patient wasn't seen until 2025, then they weren't linked in 2024. 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 "Viral load testing for newly diagnosed patients." A person newly diagnosed in 2024 and new to care at my clinic may have a viral load 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 antiretroviral initiation date to calculate alternative measures (see the Indicator Definitions spreadsheet in the template). As usual with our quality improvement 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 2024 (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. The details may change as these policies evolve.

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 care visit in the review year. All established active patients must also have had a minimum of one HIV clinical care 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? EXTCARE 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 Cascade / New-to-Care Cascade

1. Q: Is a patient considered newly diagnosed if they were previously diagnosed but are new to living within the United States?
    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, wherever it was made, was during the review period (2024).

2. Q: Are patients who are new to an organization in 2024 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 patients, 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 nucleic acid test (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 antiretroviral 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 2024 and exclude those individuals diagnosed in a previous year but new to us in 2024?
    A: All patients with HIV should be included in the template. You will use the *diagnosis* field to distinguish those who were newly diagnosed in 2024. Newly diagnosed patients are defined as any patient diagnosed for the first time in 2024 (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-antiretroviral therapy, viral load testing and viral load suppression 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). Other new-to-care patients are defined as those patients who were diagnosed prior to 2024 but were seen for the first time at your site in 2024 (or re-entered care in 2024 after two or more years absence without reported viral load). These patients will be distinguished through an entry of ACTNEW in the *enrollment* field and PREV in the *diagnosis* 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 in your organization prior to 2022, not seen by you in 2022 and 2023 (nor reported viral load in those years), but then returned in 2024, they would be considered new to care, regardless of whatever care they received externally in 2022 and 2023.

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, antiretroviral therapy prescription is now an acceptable measure of linkage to care. Therefore, if a patient receives antiretroviral therapy prescription before attending an HIV clinical visit, the date they receive the antiretroviral therapy prescription is considered the linkage date. If a patient receives HIV-specific medical care before being prescribed antiretroviral therapy, the date of that care 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 HIV-specific medical care or antiretroviral therapy 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 (2024), should providers pull their viral load recorded in 2025?
   A: No, all data must be from 2024. We understand that this may result in some patients not meeting indicator criteria. In light of this, in addition to the official indicator (all newly diagnosed patients), we also report suppression rates within 91 days just for patients diagnosed in the first 9 months of the review year.

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. **Do not include highly detailed or otherwise sensitive information in this field.**

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: People with HIV 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 general area of care 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 service ("OTH" code), with "housing services" specified in the follow-up question.

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 electronic medical record system of the HIV care provider (person's name or name of organization), and relocation entails documentation in your electronic medical record system 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 care external to your entire organization (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 HIV+ clients 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 2024? 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 viral load test in 91 days?
   A: These patients will be treated as not virally suppressed within 91 days.

3. Q: Are only patients with a viral load 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 medical record 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 (8 through 20007). 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: When I complete the Statements section, information entered, although less than the 8000-character limit, 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.

5. Q: We are wondering why the linkage chart did not populate. Granted, there were only three newly diagnosed patients in 2024, and one 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.

6. 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 qocreviews@health.ny.gov.

7. 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.

8. 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 cannot obtain permission from your IT staff to do that, please contact us at qocreviews@health.ny.gov, and we can arrange for secure transfer of the file to review the data for you.

Miscellaneous

1. Q: How do you find out who the Coach for your organization's cascade review is?
   A: See the Appendix 8 at the end of this document for a list of these Coaches by region. If you have any questions about this, please contact qocreviews@health.ny.gov.

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 coverage administered by Medicaid (e.g., AIDS Health Insurance Program, or AHIP) would also 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: When should the “ADAP” code be used for the insurance field?
   Medical care paid through the AIDS Drug Assistance Program (ADAP Plus, APIC, or similar coverage offered through the health exchanges) would be classified as “ADAP.” If the patient’s drug costs are covered through the original AIDS Drug Assistance Program but medical care is covered through another plan, that other plan should determine the entry (“PRIVATE”, “VA”, etc., or “NONE” if applicable).

5. 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.

6. Q: Is the HIV Organizational Treatment Cascade Review the same as HIVQUAL, or is it something different?
   A: The organizational treatment cascade review replaced HIVQUAL, which is no longer a component of the annual quality review.

7. 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.

8. 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).

9. Q: For a patient (for example, someone receiving methadone) who received HIV care at one point in 2024 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 2024?
   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 2024, the linkage indicator will apply. However, entry of some response for the antiretroviral therapy

indicator and the applicable viral load testing and viral load suppression fields is required for all patients; a response of “UK (unknown)” is acceptable where needed.

10. 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 2025 with 2024 data are most often referred to as the ‘2024 cascades.’ To be more explicit, the review can also be referred to as ‘the 2025 cascade review of care provided in 2024.’

11. Q: I’ve seen that you’ve distributed a new version of the template for the current review. Currently, I am working on the data entry, using a previous version of the template for this review. 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 (C8, 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.

[Appendixes continue on next page.]

Appendix 7: Glossary

<table>
<tr><th></th><th colspan="5">Care Status Categories for Indicator Eligibility</th></tr>
<tr><th></th><th></th><th colspan="4">Diagnosis</th></tr>
<tr><th></th><th></th><th>Internally diagnosed during the review period</th><th>Externally diagnosed during the review period</th><th>Diagnosed prior to the review period</th><th>Unknown</th></tr>
<tr><td rowspan="6">Enrollment</td><td>Active, new to clinic during review period, continuing in program)</td><td>"Newly diagnosed active - linkage eligible"</td><td>"Newly diagnosed active - linkage ineligible"</td><td colspan="2">"Other new to care"</td></tr>
<tr><td>Active, seen prior to the review period, continuing in program)</td><td colspan="2"></td><td colspan="2">"Established active"</td></tr>
<tr><td>Died during review period</td><td rowspan="3">"Linkage only"</td><td rowspan="3">"Excused - newly diagnosed"</td><td colspan="2" rowspan="3">"Excused - previously diagnosed"</td></tr>
<tr><td>Incarcerated as of end of review period</td></tr>
<tr><td>Relocated out of New York State during the review period</td></tr>
<tr><td>Confirmed to be receiving ongoing HIV care at another site as of end of the review period</td><td></td><td></td><td colspan="2"></td></tr>
<tr><td>Other status, not enrolled in care at your organization</td><td>"Newly diagnosed of unknown status - linkage eligible"</td><td>"Newly diagnosed of unknown status - linkage ineligible"</td><td colspan="2">"Open non-active"</td></tr>
</table>

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 2024 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 and were still enrolled in care at the end of the year.

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 in a timely fashion if the individual, subsequent to initial diagnosis of HIV disease, either received an antiretroviral

prescription or attended a routine HIV medical visit within three calendar days of the diagnosis date (and before the end of the review year).

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 2024, not seen (nor viral load reported) in 2022 or 2023, but then returned in 2024.

Non-active non-"excused" 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 New York State, or to be incarcerated at the end of the year. These patients should be included in the review and will be counted in most of the indicator scoring.

"Excused" 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 can be confirmed to have died by the end of the year, to be in care elsewhere by the end of the year, relocated outside New York State, or to be incarcerated at the end of the year. These patients should be included in the review but will not be counted in most of the indicator scoring.

Viral suppression: Previously diagnosed patients are considered virally suppressed when their last viral load test conducted in 2024 returned a value of less than 200 copies/mL. Newly diagnosed patient viral load suppression must occur within 91 days of diagnosis (any suppressed test during this time period, not last).

Older patients: This refers to a specific group of patients eligible for the optional frailty screen indicator: established active patients who were at least 51 years old by the end of the review period plus other new to care patients (newly diagnosed or new to the organization) who were at least 61 years old by the end of the review period.

[Appendixes continue on next page.]

Appendix 8: NYS Quality Coaches by Region

Region	NYLinks Coach		Treatment Cascade Questions	
	Name	Email	Name	Email
Bronx	Dan Belanger	daniel.belanger@health.ny.gov	Dan Belanger	daniel.belanger@health.ny.gov
Brooklyn	Steve Sawicki	steven.sawicki@health.ny.gov	Nova West	nova.west@health.ny.gov
Central NY & Southern Tier	Laura O'Shea	laura.oshea@health.ny.gov	Dan Belanger	daniel.belanger@health.ny.gov
Long Island	Febuary D'Auria	febuary.dauria@health.ny.gov	Febuary D'Auria	febuary.dauria@health.ny.gov
Manhattan	Susan Weigl	susan.weigl@health.ny.gov	Susan Weigl	susan.weigl@health.ny.gov
Mid & Lower Hudson Valley	Steve Sawicki	steven.sawicki@health.ny.gov	Dan Belanger	daniel.belanger@health.ny.gov
Northeastern NY	Steve Sawicki	steven.sawicki@health.ny.gov	Dan Belanger	daniel.belanger@health.ny.gov
Queens	Nova West	nova.west@health.ny.gov	Nova West	nova.west@health.ny.gov
Staten Island	Steve Sawicki	steven.sawicki@health.ny.gov	Nova West	nova.west@health.ny.gov
Western NY	Steve Sawicki	steven.sawicki@health.ny.gov	Dan Belanger	daniel.belanger@health.ny.gov