



# Tableau User Guide NYSDOH Sepsis Improvement Initiative July 2025

# **Table of Contents**

Introduction	3
Tableau	3
Accessing your Tableau Report	4
Tableau Server Home Page	5
Explore Page Folder	6
Report Updates for 2025	6
Tableau Workbook Navigation and Tool Tips	7
Tool Tips	
Quarterly Report	9
Clinical Summary Tab	g
Demographics Tab	11
Outcomes Tab	14
Patient Level Case List Tab	16
Data Quality Report	18
Data Quality Summary Tab	18
Patient List - Exceptions Tab.	
Exclusions Tab	22
Variables Tab	24
Patient List - Informational Tab	
Tableau Support	28
Tableau Password Reset Request	
Change Tableau Password	29
Need Assistance?	30

# Introduction

This guide will provide information on accessing and using your facility's Data Quality and Quarterly Reports for the New York State Sepsis Care Improvement Initiative. Both reports will be hosted on Tableau and are generated based on data submitted by your facility to the NYS Sepsis Data Collection Portal.

The purpose of the Data Quality Report is to present severe sepsis and septic shock data for hospitals to track and improve data quality. Facility-level and state-wide patterns of missing data and case-level results are available in your report.

Quarterly Reports are generated based on hospital-submitted data for all adult cases of severe sepsis and/or septic shock reported to the NYS Department of Health (NYSDOH). This includes cases that were transferred in and out of each hospital.

It is important to note that the Quarterly Report delivered via Tableau Webserver includes patient **Protected Health Information (PHI)** and **Personally Identifiable Information (PII)** to allow hospitals to drill-down on specific cases for further analysis. Users of this report must exercise caution when sharing this report to assure limiting exposure of PHI/PII to authorized individuals only.

Changes from the previous version of the user guide are highlighted in yellow.

# **Tableau**

Tableau is a business intelligence platform which enables data reporting and visualization. In order to access the report, you will need to access Tableau Server, a secure online platform. Your hospital has been provided with the necessary login credentials. Reports can be accessed at <a href="https://ipro.tableau.org">https://ipro.tableau.org</a>.

# **Accessing your Tableau Report**

The Tableau Webserver platform is available using any web browser. Login credentials were provided to your hospital's Primary User of the Sepsis Portal. Please access Tableau Webserver at:

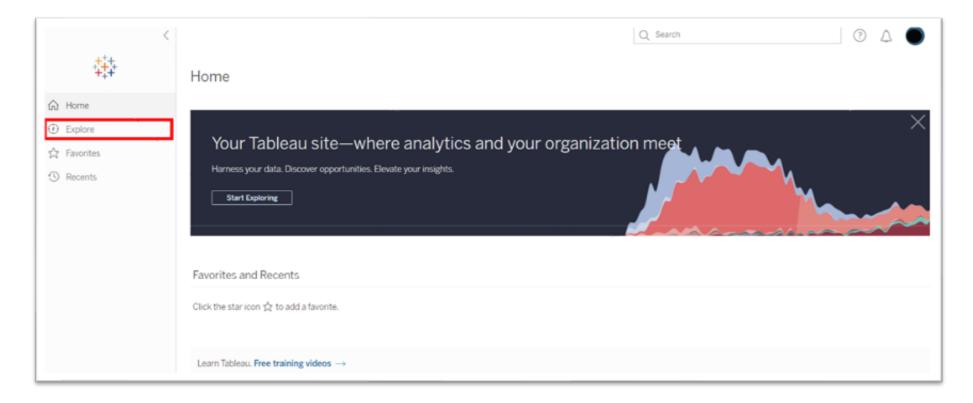
# Tableau Server (ipro.org)

The link provided will bring you to the homepage of IPRO's Tableau Server, displayed below. Users will need to login using the credentials provided to your hospital's primary point of contact.



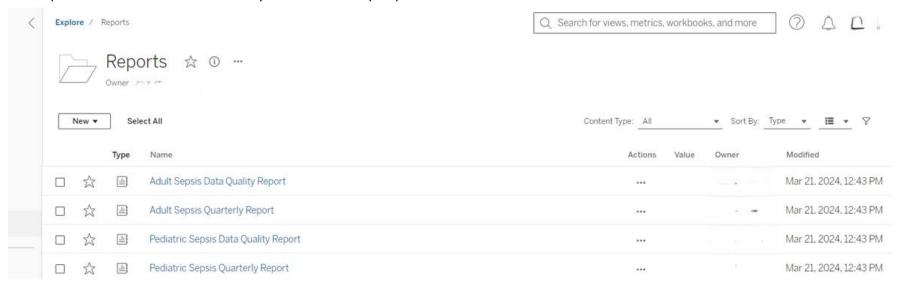
# **Tableau Server Home Page**

Once logged into your Tableau Server account, you will be taken to the Home Page. To access your reports, in the left side column, click on the 'Explore Page.' On the Explore page, you will find a Reports folder containing the Tableau Quarterly and Data Quality Reports.



# **Explore Page Folder**

The Reports folder contains the Quarterly and Data Quality Reports for Adult and Pediatric cases.



# Report Updates for 2025

Beginning with discharges occurring in calendar year 2025, data on ICU admissions will no longer be collected. As a result, charts and tables related to ICU admission data will not be displayed for individual 2025 submission periods, nor the "12 Month" ('Choose 12 Month or Quarter') filter on the following tabs of the Quarterly Reports:

- Summary Tab
- Outcomes Tab

Sections of the report where data on ICU admissions have been removed will be denoted with the following:

Due to updates to the Data Dictionary for discharges occurring in 2025, ICU admission data will no longer be displayed starting with submission period 2025 P1.

Charts and tables related to ICU admission data will still be displayed when individual submission periods for 2024 are selected using the 'Submission Period' filter.

# **Tableau Workbook Navigation and Tool Tips**

# **Tool Tips**

• **Printing**: At the top right of each tab, there is an option to download the tab as either an image, data, crosstab, PDF, PowerPoint or Tableau Workbook. When filters are applied, only what is displayed on the screen will be displayed on the downloaded file. If desired, users can print the downloaded file (PDF, PowerPoint) to obtain a hard-copy of the desired report display.



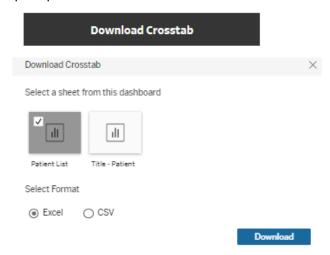
• **Specifications:** For more detailed information on the calculation of displayed metrics, click the "Specifications" link located at the top of each tab of the report.



• **User Guide:** To access the User Guide from any page of the report, click the "User Guide" link located in the top-right of each tab of the report.



• **Download Crosstab**: On pages of the report where patients are listed in a table, users have the option to download the table in CSV or Excel format. To do this, users should click 'Download Crosstab' on the page of interest and follow the prompts to download the file.



- **Filters**: Interactive reports contain filters, which allow a user to customize the report to fit their specific needs. These filters allow a user to drill-down into specific subsets of data. Once a filter is selected, the graph will update to reflect a user's specifications. Filters will not affect the original report. For some graphs, users can click on a plot to selectively filter the graph for a selected element. Users can revert to the original, unfiltered graph by re-clicking the selected plot. All filter boxes (i.e., Population Stratification, Age Group) and search engine (i.e., Search Unique ID) are located in the top right corner.
- Hover-over: Hover over graphs, trends lines, and cells to see more detail about the selected data.
- **Sorting**: At the top of each column, there are either three bars or an 'A->Z' symbol that will sort the data in ascending or descending order.

Age		
Age Grouping 🔻	Patients 🗐	Percentage
70-79	4	6.90%
60-69	4	6.90%
80-89	1	1.7296
30-39	1	1.7296

# **Quarterly Report**

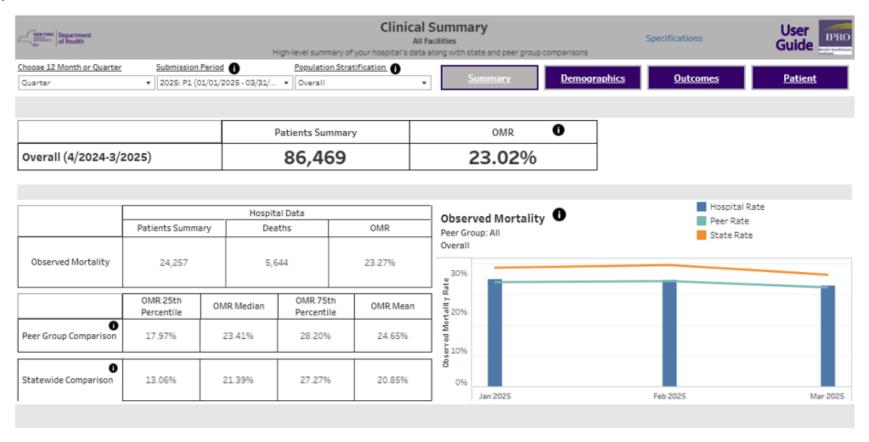
# **Clinical Summary Tab**

The purpose of this tab is to provide a high-level summary of your hospital's data along with statewide and peer group comparisons. The population stratification selection defaults to overall population but allows for filtering by diagnosis-based sub-populations defined by the data dictionary. Hospital and comparison data will adjust to the selected population.

The summary table shows the number of patients and the observed mortality rate for your hospital. The default timeframe is the rolling year, i.e., the last 12 months. The screenshot on page 10 shows the observed mortality rate (OMR). Tables and charts are presented for each hospital detailing the numerator ("Deaths"), denominator ("Patients Summary"), and rate ("OMR"). The table on the left provides statewide and peer group comparison data showing the 25th percentile, median, 75th percentile, and the mean. Hospital-level, statewide and peer group comparison data are also displayed on the graphs below.

Hospitals can use the "Choose 12 Month or Quarter" filter seen in the upper left corner of the screenshot to display each of the last four data submission periods or the entire last 12 months on a rolling basis. Please note that the peer and state comparison data for observed mortality will only display when individual data submission periods (quarters) are selected, but will be blank when the last 12 months are selected. A future enhancement will provide comparison data also when the last 12 months are selected.

Peer groups are determined by the hospital's HCUP hospital size category, taking into account hospital size, inpatient bed count, residential density (urban vs. rural) and teaching vs. nonteaching hospitals. More information can be found at: <a href="https://www.hcup-us.ahrq.gov/db/vars/hosp\_bedsize/kidnote.jsp">https://www.hcup-us.ahrq.gov/db/vars/hosp\_bedsize/kidnote.jsp</a>.



Due to updates to the Data Dictionary for discharges occurring in 2025, ICU admission data will no longer be displayed starting with submission period 2025 P1.

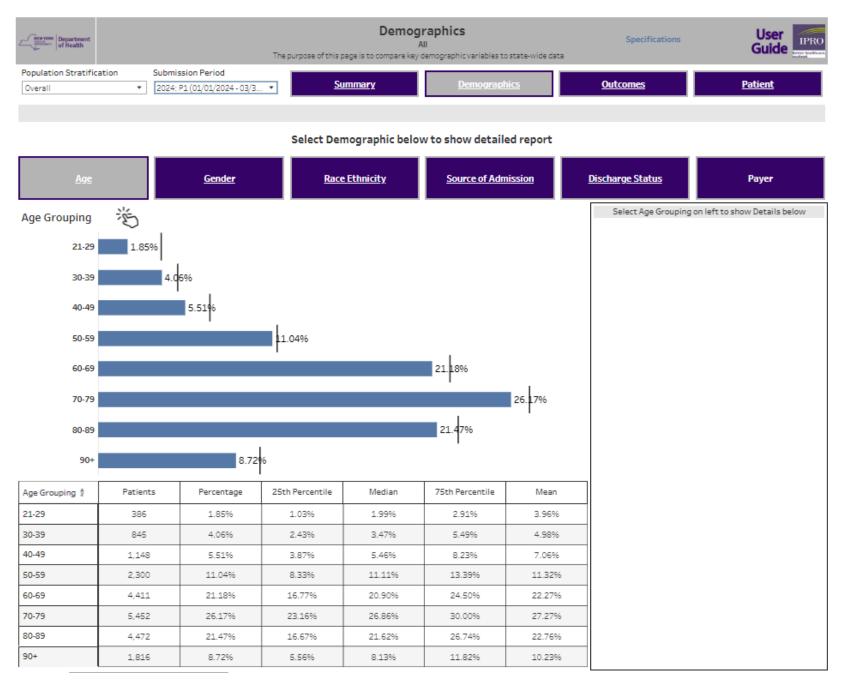
# **Demographics Tab**

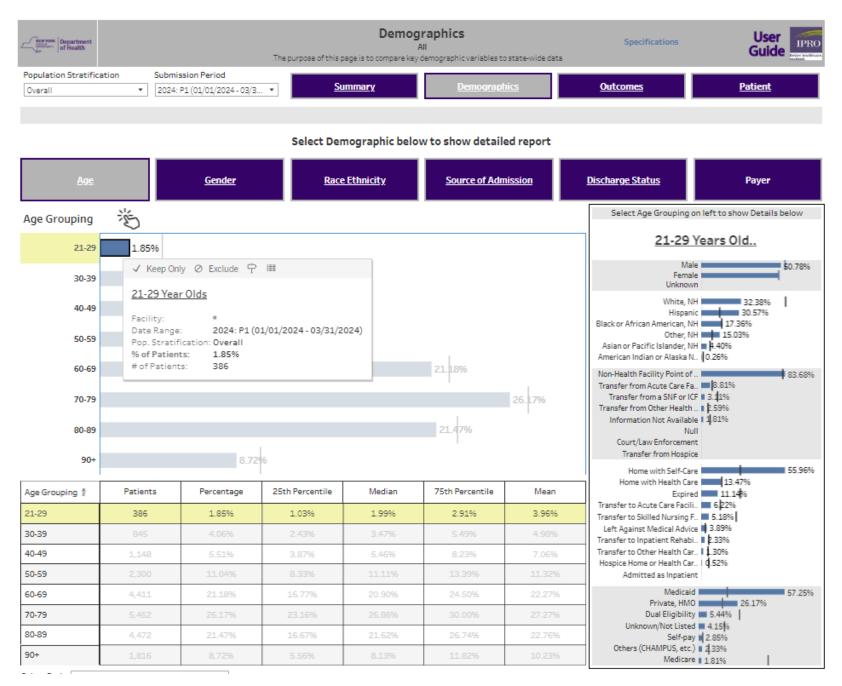
The purpose of this tab is to compare key hospital-level demographic variables to statewide data. Using the population stratification filter, these comparisons can be applied to the overall patient population and severe sepsis and/or septic shock cases. The demographic variables displayed on this tab include age, gender, race and ethnicity, payer, source of admission, transfer status, and discharge status.

To view detailed reports for specific demographics, select a demographic category using the buttons on the top of the page. After selecting a demographic category, the report will populate with a bullet chart and table based on your selection.

- The bullet graph displays the data for the selected variable and population filter. The blue bar shows the hospital's percentage, and the black bar represents the mean percentage based on state-wide data for the selected performance period. Hover over the blue bar to view the number and percentage of cases for a given group.
- The tables summarize the demographics variables by showing the count and percent of cases for the hospital within each category and 25<sup>th</sup> percentile, median, 75<sup>th</sup> percentile, and mean for hospitals statewide. Only hospitals with at least 10 cases for the selected submission period are included in the calculation of 25th percentile, median, and 75th percentile.

To view detailed information on a specific group (e.g., Age Grouping 21-29) within a demographic category, either click the bar associated with the target group on the bullet chart or click the row associated with the target group in the table at the bottom of the report. After selecting a specific group, the box on the right-hand side of the report will populate with more detailed demographic information for the selected group.





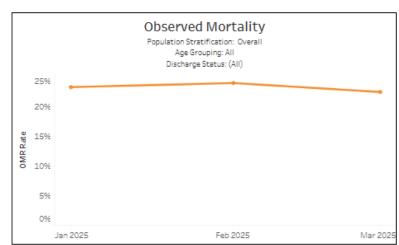
# **Outcomes Tab**

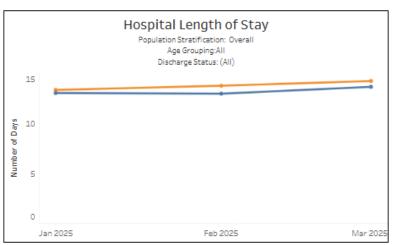
This tab focuses on four key outcomes:

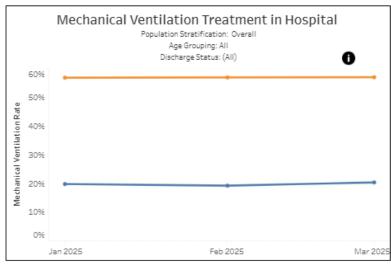
- In-hospital observed mortality rate (%),
- Mechanical ventilation rate (%), and
- Hospital length of stay (# of days).

The graphs display the hospital's data for observed mortality rate, mechanical ventilation rate, and the hospital length of stay. Using the population stratification selector, this comparison can be applied to the overall patient population and filtered for severe sepsis and/or septic shock cases. The population can be further stratified by age group and whether the patient was discharged alive or expired.









Due to updates to the Data Dictionary for discharges occurring in 2025, ICU admission data will no longer be displayed starting with submission period 2025 P1.

# **Patient Level Case List Tab**

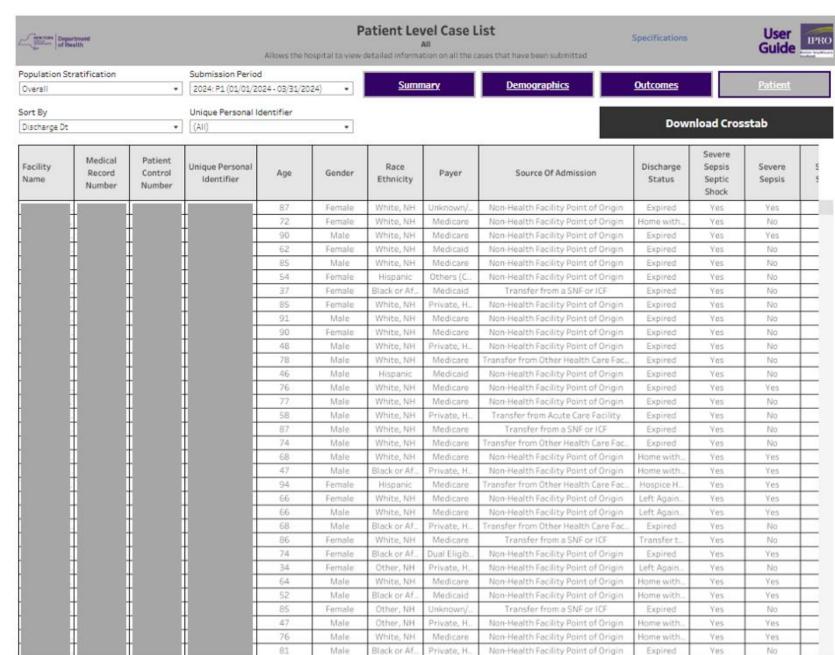
This section allows the hospital to view detailed information on all cases that have been submitted. Using the population stratification filters allows hospitals to selectively view cases with severe sepsis and/or septic shock. In addition, cases can be sorted by each of the variables. Hospitals can also use the Search Unique ID selection box in the upper-right-hand corner of this section, to search for specific cases by their Unique ID, i.e. the case's Universal Patient Identifier.

To download the displayed table in CSV or Excel format, click "Download Crosstab."

To download data for 2024 discharges, which includes data for the 'ICU During Hospitalization' variable, select "Patient List 2024," and click the download button.

To download data for 2025 discharges, which does not include data for the 'ICU During Hospitalization' variable, select "Patient List 2025," and click the download button. Please note that if you select "Patient List 2024" when downloading data from a submission period in 2025, the 'ICU During Hospitalization' field will read "No" for all cases.

Download Crosstab	×	Download Crosstab	×
Select a sheet from this dashboard		Select a sheet from this dashboard	
Patient List 2024		Patient List 2024	
III Patient List 2025		Patient List 2025	
Select Format		Select Format	
Excel		● Excel	
	Download	Download	



# **Data Quality Report**

# **Data Quality Summary Tab**

The purpose of this tab is to provide a high-level summary of the hospital's data, as well as missing data.

# Data Quality Case Summary & Population Breakdown (formatting different from quarterly reports)

- The top case summary tables provide key case metrics by month.
- The Data Quality and Case Summary table focuses on uploaded cases, cases with exceptions, cases not meeting inclusion criteria, and cases meeting inclusion criteria.
- o The Population Breakdown table provides monthly case counts for two patient populations
  - Severe sepsis
  - Septic shock
- o The bar graph underneath the tables displays the monthly count of uploaded cases.

## Missing and Invalid Case Summary

The Missing and Invalid Case Summary table summarizes your hospital's missing data by count and percentage for cases missing data for demographic and severity variables. This table can be filtered using the population stratification filter above the tables. More detailed information on missingness of demographic and severity variables is provided in the Variables tab.



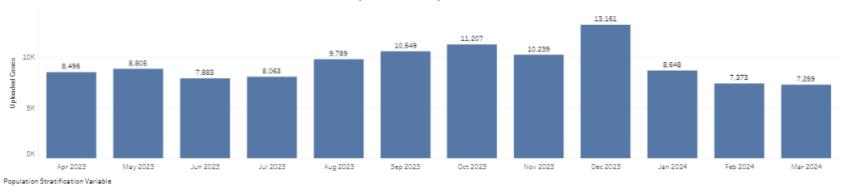
	Apr 23	May 23	Jun 23	Jul 23	Aug 23	Sep 23	Oct 23	Nov 23	Dec 23	Jan 24	Feb 24	Mar 24	Annual Cases
Uploaded Cases	8,496	8,805	7,883	8,063	9,789	10,549	11,207	10,239	13,161	8,648	7,373	7,259	111,472
Cases with Exceptions	6	4	2	4	7	14	16	10	11	2	2	7	85
Cases not Meeting Inclusion Criteria*	2,685	2,450	2,003	2,257	3,682	4,678	4,832	3,954	6,228	1,171	657	466	35,063
Cases Meeting Inclusion Criteria	5,811	6,355	5,880	5,806	6,107	5,871	6,375	6,285	6,933	7,477	6,716	6,793	76,409

<sup>\*</sup>Please Note: The current ICD-10 CM Code (n) variable allows for up to 25 final hospital billed ICD-10 CM diagnosis codes to be reported through the Sepsis Portal. A case reported where an ICD-10 CM code that meets inclusion criteria for reporting is found beyond the first 25 final hospital billed ICD-10 CM codes may be flagged in the Data Quality Reports as not meeting inclusion criteria. Please review your data and if this is the only reason for the flag, the case(s) were correctly reported and corrections to the data should not be necessary.

#### Population Breakdown

	Apr 23	May 23	Jun 23	Jul 23	Aug 23	Sep 23	Oct 23	Nov 23	Dec 23	Jan 24	Feb 24	Mar 24	Annual Cases
Severe Sepsis	2,375	2,646	2,530	2,411	2,564	2,450	2,704	2,710	2,939	3,230	2,867	2,860	32,286
Septic Shock	3,448	3,735	3,374	3,408	3,558	3,444	3,692	3,589	4,020	4,267	3,866	3,951	44,352
Severe Sepsis or Septic Shock	5,809	6,354	5,879	5,804	6,103	5,867	6,368	6,278	6,933	7,476	6,714	6,786	76,371

## Uploaded Cases per Month



#### Missing and Invalid Case Summary - Overall

Overall

	2023: P2 (04/01/2023 - 06/30/2023)	2023: P3 (07/01/2023 - 09/30/2023)	2023: P4 (10/01/2023 - 12/31/2023)	2024: P1 (01/01/2024 - 03/31/2024)	Grand Total
# Cases with Missing Demographics	2,268	2,195	2,273	2,497	9,233
% Cases with Missing Demographics	12.57%	12.35%	11.61%	11.90%	12.09%

#### Missing and Invalid Case Summary - Overall

	2023: P2 (04/01/2023 - 06/30/2023) 2023: P3 (07/01/2023 - 09/		2023: P4 (10/01/2023 - 12/31/2023)	2024: P1 (01/01/2024 - 03/31/2024)	Grand Total	
# Cases with Missing or Invalid Severity	14,695	14,602	16,038	17,175	62,510	
% Cases with Missing or Invalid Severity	81.45%	82.15%	81.91%	81.88%	81.85%	

# **Patient List - Exceptions Tab**

This tab lists the number of exceptions resulting in the exclusion of cases from the Quarterly Report. These cases should be corrected by the hospital before the next data submission window closes.

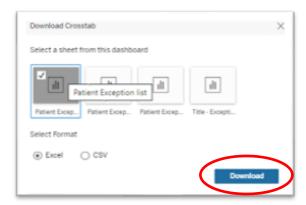
The five exceptions are

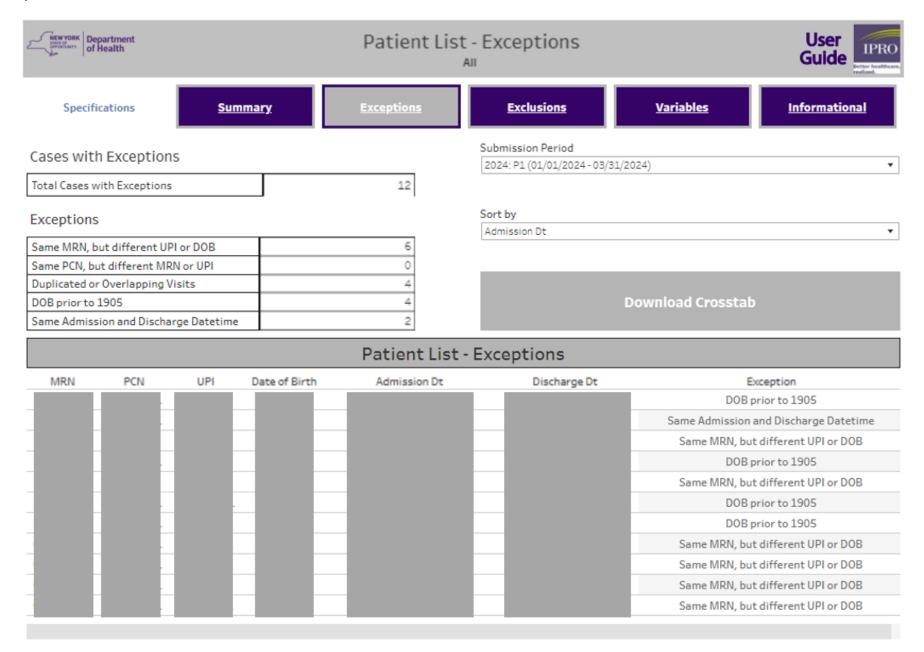
- Same Medical Record Number, but different Universal Patient Identifier or Date of Birth
- Same Patient Control Number, but different Medical Record Number or Universal Patient Identifier
- Duplicated or Overlapping Visits
- Date of Birth prior to 1905
- Same admission and discharge datetime

The Cases with Exceptions and Exceptions tables summarize the number of cases with exceptions and the count of cases that fall under each exception.

The Patient List – Exceptions table provides the hospital with the details of which cases were flagged as exceptions so that the hospital can identify and correct these cases before their next data submission.

To download the displayed table in CSV or Excel format, click "Download Crosstab," select "Patient Exception list," and click the download button.



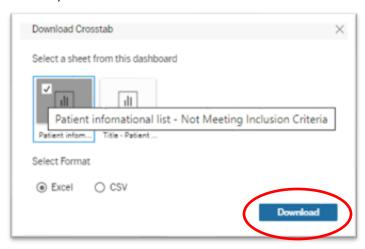


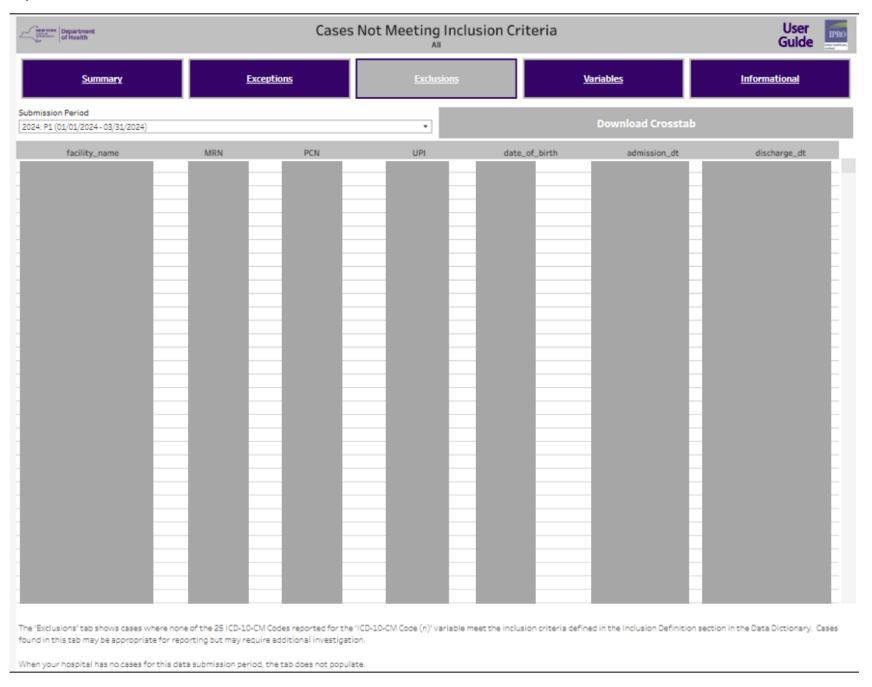
# **Exclusions Tab**

This tab lists all cases not meeting inclusion criteria based on the submitted ICD-10 codes for each case. The table lists the individual cases included in the count of "Cases not Meeting Inclusion Criteria" in the top table of the Data Quality Report Summary Tab. Cases are only displayed on this tab if none of the 25 ICD-10-CM Codes reported for the 'ICD-10-CM Code (n)' variable meet the inclusion criteria defined in the Inclusion Definition section of the Data Dictionary. Please note that when your hospital has no cases not meeting inclusion criteria for the selected data submission period, this tab does not populate.

Hospitals should investigate why cases not meeting inclusion criteria were submitted and correct the data if necessary.

To download the displayed table in CSV or Excel format, click "Download Crosstab," select "Patient informational list – Not Meeting Inclusion Criteria," and click the download button.

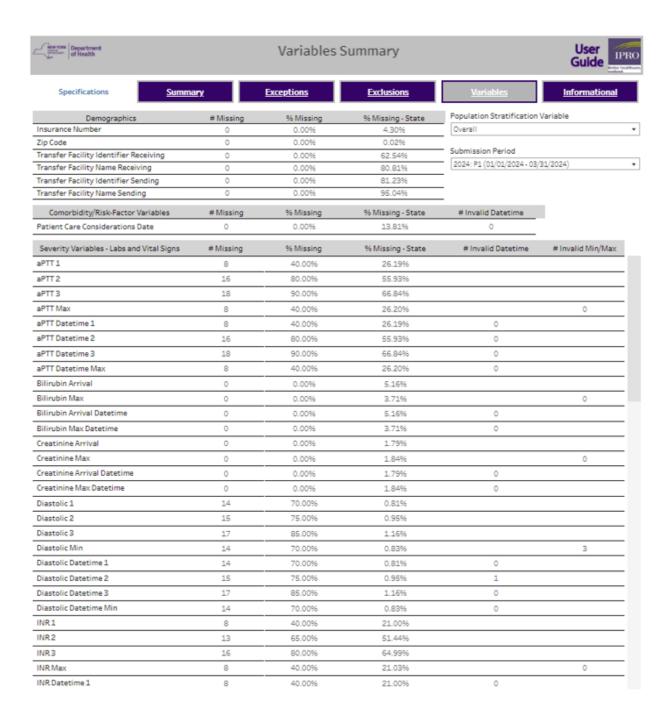




# **Variables Tab**

This tab allows hospitals to see a detailed breakdown of missing data for its overall patient population and its severe sepsis and/or septic shock populations in comparison to statewide data. Filters in the top right corner allow users to select each submission period and subpopulation. This tab allows hospital to assess for which variables they have more missing data than hospitals statewide.

- The top table shows demographic variables allowing blanks. This table shows the number and percentage of cases missing data for this variable for your hospital, and the percentage of cases missing data for this variable at the state-level.
- The table below lists the same information for severity variables.
- For datetime variables, the table also lists the count of cases where there are inconsistent datetimes, such as datetimes that lie outside the window that patients were admitted or datetimes 1, 2, and 3 that are not sequential.
- For min/max variable the table lists the count of cases where the min/max value does not represent a min/max value when compared to the corresponding severity variables.



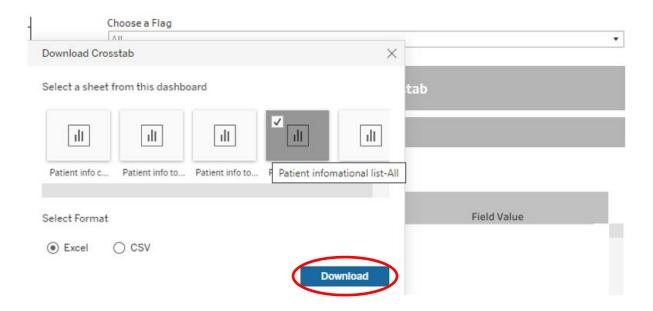
# Patient List- Informational Tab:

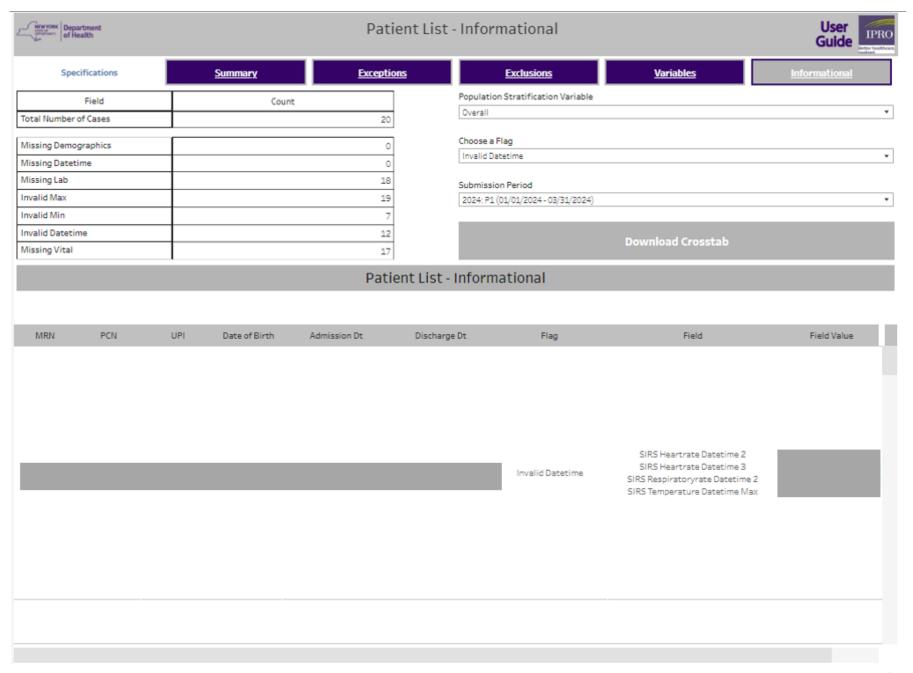
This tab provides information about data quality checks that are not exceptions. These data quality checks do not result in the exclusion of cases from the quarterly analysis.

The summary table on the top-left lists the number of data quality checks by type: missing demographics, labs, datetimes, and vital signs along with invalid min, max and datetimes.

The table on the next page lists all cases that were flagged, indicating the MRN, PCN, UPI, Date of Birth, Admission Date, and Discharge Date for the identified cases. Hospitals are encouraged to double-check the patient's information and correct the data if necessary.

To download the displayed table in CSV or Excel format, click "Download Crosstab," select "Patient informational list – [Selected Flag]," and click the download button.



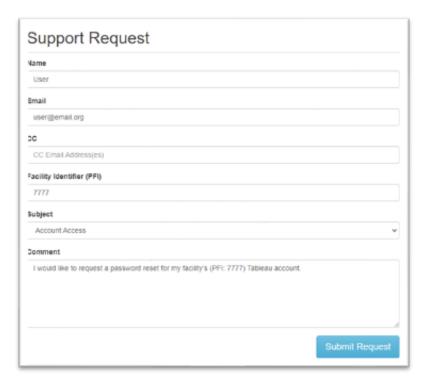


# **Tableau Support**

# **Tableau Password Reset Request**

Requests to reset your password must be submitted by your facility's primary portal user using the <u>Create a Helpdesk Ticket</u> function on the Sepsis Data Collection Portal. Password reset requests can only come from the primary sepsis portal user because the primary user has attested to the User Attestation on the Sepsis Portal which applies to this account. In your request, be sure to indicate your facility's PFI, and specify that the password reset request is for your facility's <u>Tableau</u> account (as opposed to your individual Sepsis Data Collection Portal account).

## Example:



Password resets/changes are conducted manually, so please allow adequate time for your request to be processed.

# **Change Tableau Password**

To change the password for your facility's Tableau Webserver account, you must first be logged in to your facility's account. From the Tableau homepage, click your facility's initials in the upper right-hand corner of the page, and select 'My Account Settings.'



From the 'Settings' tab, click the 'Change Password' button under the 'Account' header.



You will then be prompted to create and save a new password. Please note that you must be logged in to your facility's Tableau Webserver account and enter your old password to complete this process. If you are unable to login to your facility's account, please request a password reset by following the process outlined in the 'Tableau Password Reset Request' section of this guide.

# **Need Assistance?**

If you have any questions and/or suggestions to improve this report, please contact IPRO at through the HelpDesk