



# CRISP

Chesapeake Regional Information  
System for our Patients

# CEND/Population Explorer User Guide

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# CEND & Population Explorer

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## 1 Overview

Population Explorer is a module of the HIE Portal that enables near-real time encounter notifications from CSS Insights, as well as functionality to filter, view details, and export notifications of interest. This document serves as a general user guide to assist in navigating Population Explorer and associated functionality.

Population Explorer offers a user-friendly interface for clinicians and care teams to review patients' encounters, providing access to the latest encounters and six-month encounter history. It is integrated directly in the CRISP Portal Homepage. To learn more, visit our [CEND and Population Explorer website page](#).

## 2 Event Notification Delivery Methods through CEND

CEND supports ADT & Notification bulk files integrations via SFTP, MFT, & EMR. Additionally, we created an application called Population Explorer, enabling users to view notifications. More methods are being developed.

Notification delivery via Doc Halo & CRISP Direct are **NOT** supported under CEND.

## 3 Accessing Population Explorer

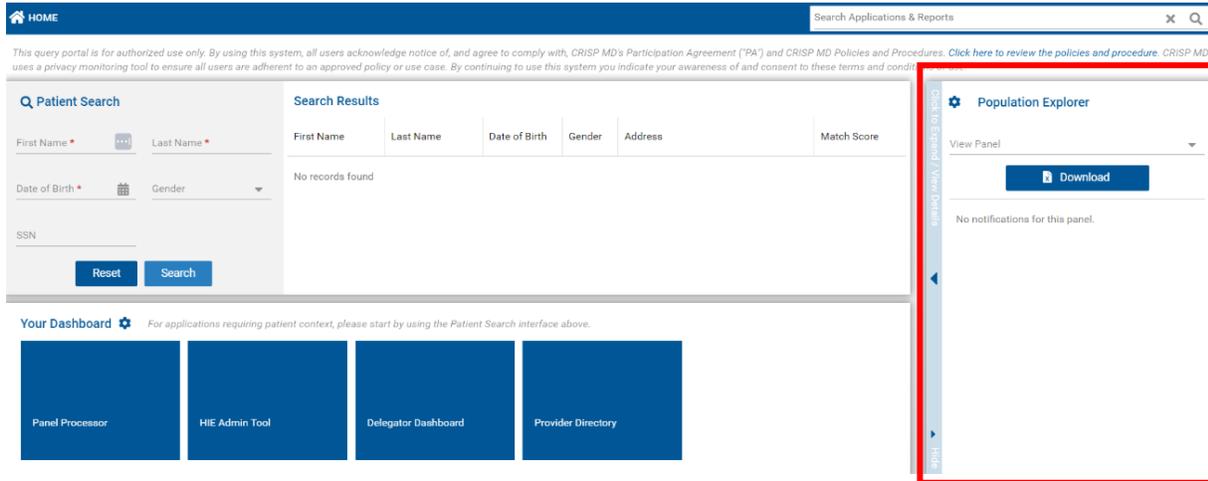
Access to the Population Explorer module is granted by your HIE Admin from the CSS Salesforce HIE Admin Tool. Once you have been granted access, it will natively appear in the HIE Portal Landing page as a new widget on the right-hand side of the screen. If you do not have access to Population Explorer and believe that you should, please contact your organizational HIE Admin.

Once you have access to Population Explorer itself, access to patient notifications is managed via your Panel Subscriptions. For more information on creating and managing panels, contact your account manager.

*To learn more, visit our [CEND and Population Explorer website page](#).*

## 4 Population Explorer Basic Functionality

After logging into the CRISP Portal once Population Explorer access has been granted, you will see a new widget pane appear on the right-hand side of the screen, as shown below.

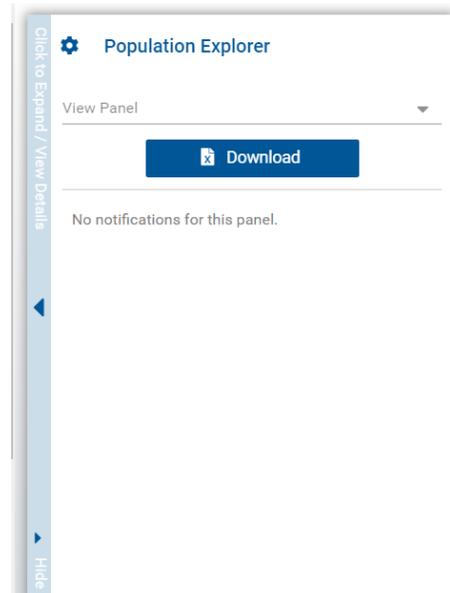


### 4.1 Panel Selection & Notification Timing

To choose a panel, use the drop-down menu labeled 'View Panel' at the top of the pane. All your available panels will be listed here, along with any advanced panels you have created (see section 8 below). The pane will then display encounter notifications for the selected panel.

Notification updates are fetched every twenty minutes but are not loaded to the interface automatically to avoid disrupting user workflows. A notification icon will appear in the upper right-corner of the Population Explorer after a notification sync, informing you that new notifications may be available. Click the icon to load any new notifications. Twenty-five notifications load at a time; simply scroll down to load more. If no notifications are available, a 'No data to display' message will show.

To download the current list of notifications, click the 'Download' button below the panel selection dropdown menu.



## 4.2 Population Explorer Settings

Clicking the gear icon in the upper left corner of the Population Explorer pane will bring up the settings for the module. This allows you to set your preferred defaults, including the default view on load for the Population Explorer, default panel to select on opening, default filter to select on opening, and default number of records included in downloaded extracts. You can also set whether you would like to hide notification status management and enable advanced panels here. Notification auto-load is currently disabled and cannot be turned on.

### Population Explorer Settings ×

Default panel  
WVHIN Demo2 - Ambulatory Panel (WV\_D2\_AMB\_P) ▼

---

Default filter ▼

---

Default widget view  
Normal View ▼

---

Download size  
500 ▲▼

---

Hide notification status management features:

Enable notification auto load:

Enable advanced panel builder:

RESET ALL DISCARD CHANGES SAVE CHANGES CLOSE

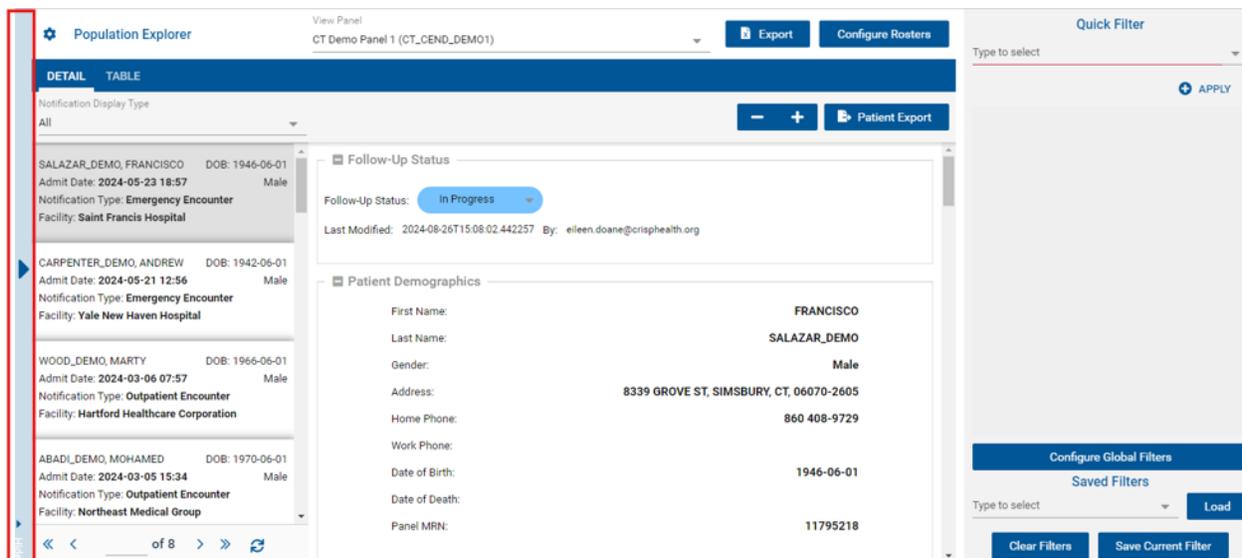
## 4.3 Event Notification Display

In Population Explorer, all related patient events will be consolidated into a single encounter line item. This provides one complete encounter with the patient's latest status.

## 4.4 Expanded View

To expand the Population Explorer and access additional functionality, click the blue expansion bar on the left-hand side of the pane. Clicking the expansion bar again will collapse, then hide the pane entirely. Clicking again will restore the pane to its default view.

The Expanded View shows the current notification list, Detail View, and Quick Filter interfaces all in one location, as shown below. You can also toggle between viewing just Encounters, just Notifications, or all alerts using the selector in the upper left-hand corner of the window. These items are described in greater detail in the sections that follow.



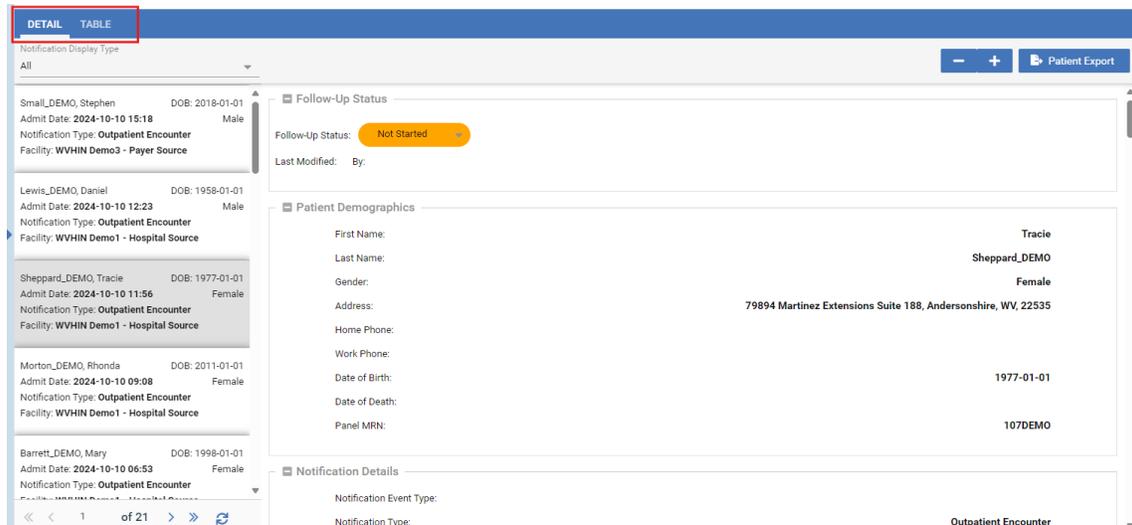
The screenshot displays the CRISP Population Explorer interface. On the left, a list of notifications is shown, with a blue expansion bar on the far left. The first notification is for SALAZAR\_DEMO, FRANCISCO, DOB: 1946-06-01, Admit Date: 2024-05-23 18:57, Notification Type: Emergency Encounter, Facility: Saint Francis Hospital. The second is CARPENTER\_DEMO, ANDREW, DOB: 1942-06-01, Admit Date: 2024-05-21 12:56, Notification Type: Emergency Encounter, Facility: Yale New Haven Hospital. The third is WOOD\_DEMO, MARTY, DOB: 1966-06-01, Admit Date: 2024-03-06 07:57, Notification Type: Outpatient Encounter, Facility: Hartford Healthcare Corporation. The fourth is ABADI\_DEMO, MOHAMED, DOB: 1970-06-01, Admit Date: 2024-03-05 15:34, Notification Type: Outpatient Encounter, Facility: Northeast Medical Group. The center panel shows the detail view for the first notification, including Follow-Up Status (In Progress) and Patient Demographics (First Name: FRANCISCO, Last Name: SALAZAR\_DEMO, Gender: Male, Address: 8339 GROVE ST, SIMSBURY, CT, 06070-2605, Home Phone: 860 408-9729, Work Phone: 1946-06-01, Date of Birth: 1946-06-01, Date of Death: 11795218, Panel MRN: 11795218). The right panel shows the Quick Filter interface with a search bar and an APPLY button.

## 4.5 Detail View

To view the details for a notification, click on the notification you want to review. This will bring up a Notification Detail View that contains additional information on the notification, as shown below.

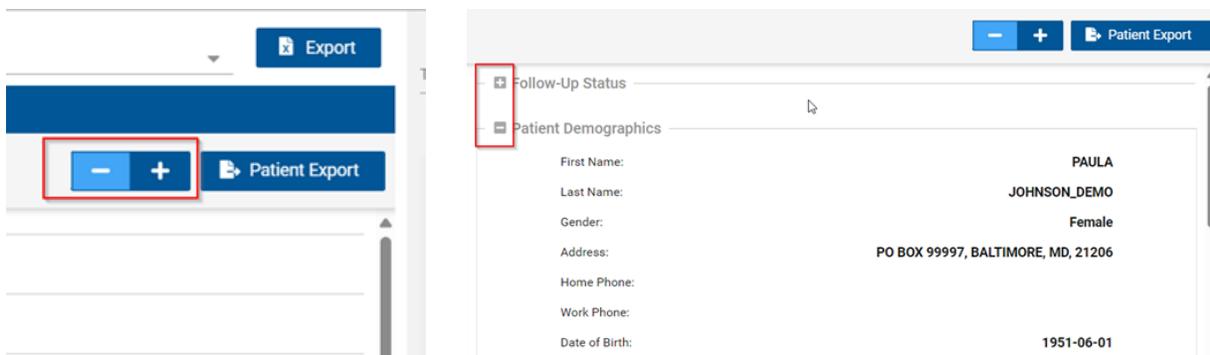
Along with the encounter details for the selected notification, the Detail View will contain all other notifications for the selected patient; loading history for the past 6 months by default. Clicking on any one of these past notifications will switch to the detail view for that notification.

If you scroll down in the Detail View window, you will also see an expanded list of all diagnosis codes associated with that event.



The screenshot shows the 'DETAIL' view of a patient's record. At the top, there are tabs for 'DETAIL' and 'TABLE'. Below the tabs, there are expand/collapse buttons (minus and plus) and a 'Patient Export' button. The main content area is divided into several sections: 'Follow-Up Status' (showing 'Not Started'), 'Patient Demographics' (showing name, gender, address, and date of birth), and 'Notification Details' (showing 'Outpatient Encounter'). A list of patients is visible on the left side of the panel.

You can expand or collapse all sections of the Detail View panel using the plus and minus buttons at the top of the screen, respectively.

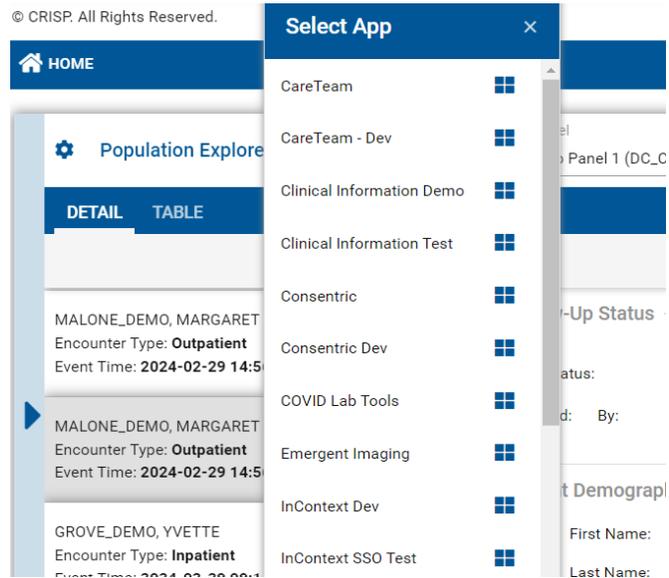


This close-up screenshot highlights the expand/collapse controls (minus and plus buttons) and the 'Patient Export' button. The minus button is highlighted with a red box, indicating its function to collapse sections. The plus button is also visible, indicating its function to expand sections.

To export the current Detail view, click on the Patient Export button to export it in your preferred format. Additional information on the export functionality is available in section 7 below.

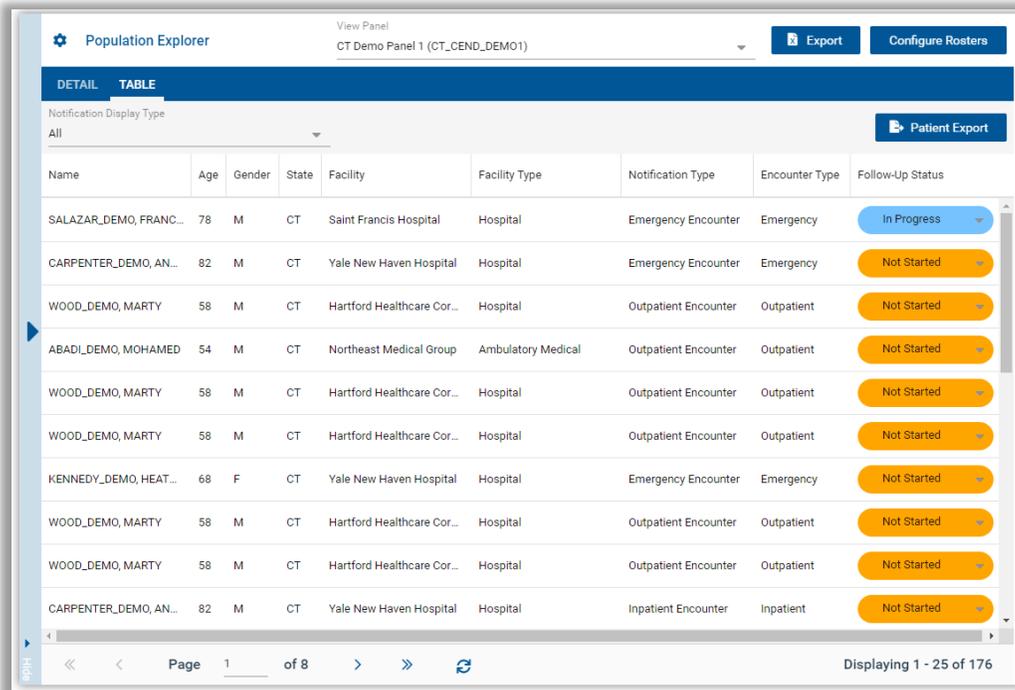
## 4.6 Launching Patient Information into Clinical Information or Other Apps

When you right-click on a patient in either the expanded or collapsed view, you can easily access the selected patient's clinical information within the portal. This method also allows you to launch other applications, although only applications such as Clinical Information or Snapshot, which are intended for use with a single patient, will automatically display the selected patient's data.



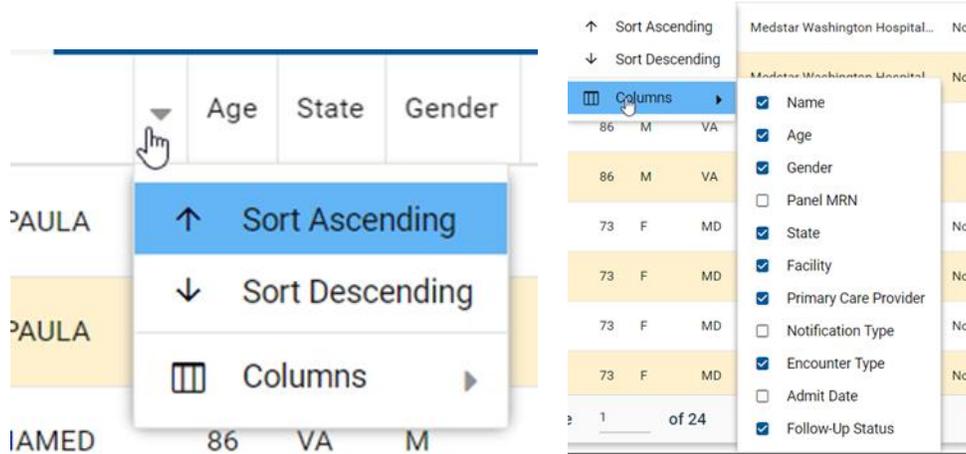
## 4.7 Table View

Using the tabs in the upper left corner of the Expanded View, users can switch between Detail View and Table View. Table View presents users with a customizable list of notifications. The column headers allow users to edit what data is shown for the notification and the order in which notifications are sorted.



Name	Age	Gender	State	Facility	Facility Type	Notification Type	Encounter Type	Follow-Up Status
SALAZAR_DEMO, FRANC...	78	M	CT	Saint Francis Hospital	Hospital	Emergency Encounter	Emergency	In Progress
CARPENTER_DEMO, AN...	82	M	CT	Yale New Haven Hospital	Hospital	Emergency Encounter	Emergency	Not Started
WOOD_DEMO, MARTY	58	M	CT	Hartford Healthcare Cor...	Hospital	Outpatient Encounter	Outpatient	Not Started
ABADI_DEMO, MOHAMED	54	M	CT	Northeast Medical Group	Ambulatory Medical	Outpatient Encounter	Outpatient	Not Started
WOOD_DEMO, MARTY	58	M	CT	Hartford Healthcare Cor...	Hospital	Outpatient Encounter	Outpatient	Not Started
WOOD_DEMO, MARTY	58	M	CT	Hartford Healthcare Cor...	Hospital	Outpatient Encounter	Outpatient	Not Started
KENNEDY_DEMO, HEAT...	68	F	CT	Yale New Haven Hospital	Hospital	Emergency Encounter	Emergency	Not Started
WOOD_DEMO, MARTY	58	M	CT	Hartford Healthcare Cor...	Hospital	Outpatient Encounter	Outpatient	Not Started
WOOD_DEMO, MARTY	58	M	CT	Hartford Healthcare Cor...	Hospital	Outpatient Encounter	Outpatient	Not Started
CARPENTER_DEMO, AN...	82	M	CT	Yale New Haven Hospital	Hospital	Inpatient Encounter	Inpatient	Not Started

Users can also click the panel expander to add or cut certain data criteria and filters.

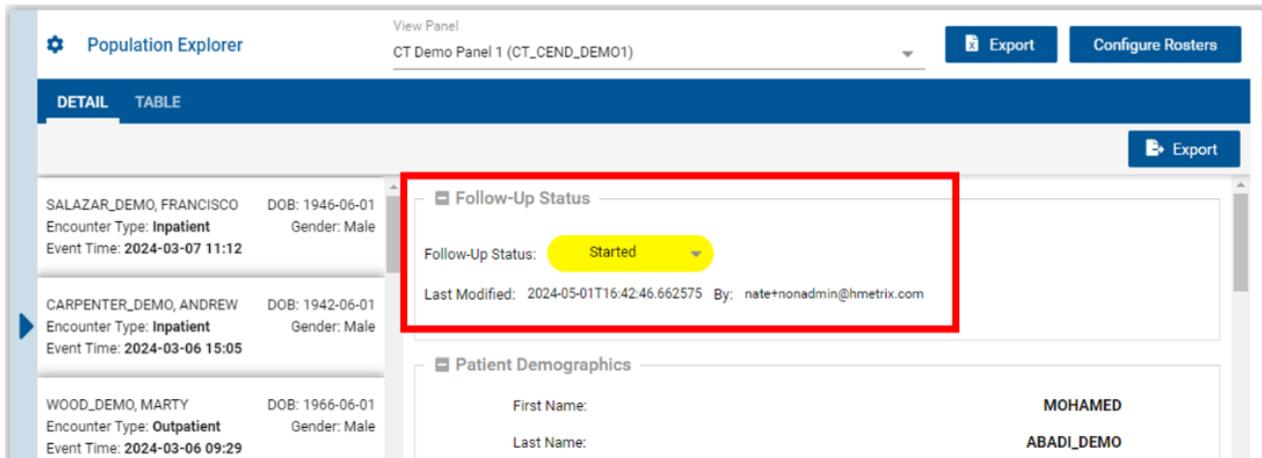


## 5 Patient Event Information

In the expanded view of Population Explorer, users can scroll to see the following sections: Follow Up Status; Patient Demographics; Selected Encounter Details; Diagnosis Details; Follow Up Status History; Encounter History

### 5.1 Follow Up Status

This functionality allows you to track the follow-up status of a notification within the Population Explorer interface and is automatically activated in the UI.





To opt-out of notification status, simply click the gear icon in the upper left corner of the Population Explorer pane and check the 'Hide Notification Status Management features.' Note that this will not change or remove any statuses that have been set; it simply determines whether the functionality displays in the UI so that users who do not need this functionality can hide it to keep their interface clean. By default, this is enabled.

The screenshot shows the 'Population Explorer Settings' dialog box. It has a title bar with a close button (X). Below the title bar are several settings: 'Default panel' (dropdown), 'Default filter' (dropdown), 'Default widget view' (dropdown set to 'Normal View'), and 'Download size' (dropdown set to '500'). At the bottom, there are three checkboxes: 'Hide notification status management features:' (unchecked), 'Enable notification auto load:' (unchecked), and 'Enable advanced panel builder:' (checked). At the very bottom are four buttons: 'RESET ALL', 'DISCARD CHANGES', 'SAVE CHANGES', and 'CLOSE'.

If enabled, a Status drop-down menu will be available for each encounter in both the Detail View and Table view along with Last Edited information. The available status values are 'Not Started', 'In Progress', and 'Complete', and a set status will be shared with all users who have access to the specific panel and notification you are currently viewing.

The screenshot shows the 'Population Explorer' interface. At the top, there's a header with 'Population Explorer', 'View Panel' (WVHIN Demo2 - Ambulatory Panel (WV\_D2\_AMB\_P)), 'Export', and 'Configure Advanced Panel'. Below the header is a navigation bar with 'DETAIL' and 'TABLE' tabs. A 'Notification Display Type' dropdown is set to 'All'. A 'Patient Export' button is on the right. The main area is a table with columns: Name, Age, Gender, State, and Encounter Type. The table contains 11 rows of patient data. To the right of the table is a 'Follow-Up Status' column with a dropdown menu for each row. The dropdown menu is highlighted with a red box and shows three options: 'In Progress' (blue), 'Complete' (green), and 'Not Started' (orange). The bottom of the interface shows pagination: 'Page 1 of 21' and 'Displaying 1 - 25 of 504'.

The last user to make a change to the status will be displayed next to the current status, along with the time of the change. Status values will persist for a given notification until a user changes the value and are for informational purposes only. CRISP does not edit or otherwise maintain these statuses – they are entirely user-driven. The status for patients can be included as a data element in exported extracts along with other information, as described in the next section.



## 5.2 Patient Demographics

The 'Patient demographics' section aggregates the demographic information CRISP has in the 'Master Patient Index (MPI)' for your patient. Data in the MPI is pulled from multiple sources and organizations for your patient.

The Patient Demographics section contains:

- Patient First Name
- Patient Last Name
- Gender
- Address
- Patient Date of Birth
- Home Phone\*
- Work Phone\*

Patient Demographics	
First Name:	MARGARET
Last Name:	MALONE_DEMO
Gender:	Female
Address:	25 RIBBON ST, CHEVY CHASE, MD, 20815
Date of Birth:	1942-06-01
Home Phone:	
Work Phone:	

\*This fields will be filled if applicak

## 5.3 Selected Encounter Details

The Selected Encounters section provides information on the specific encounter for the patient.

The Selected Encounters section con

- Admit Time and Date:
- Event Time and Date:
- Admit Source:
- Care Manager:
- Care Manager Email:
- Care Program:
- Discharge Date:
- Discharge Disposition:
- Discharge to Location:
- Insurance Type:
- Encounter Type:
- Patient Class:
- Patient Complaint:
- Point of Care:
- Primary Diagnosis Code:
- Primary Diagnosis Descripti

Selected Encounter Details	
Admit Date / Time:	2024-02-29 14:55
Event Date / Time:	2024-02-29 14:56
Admit Source:	RP
Care Manager:	
Care Manager Email:	
Care Program:	
Discharge Date:	
Discharge Disposition:	
Discharge To Location:	
Insurance Type:	AARP HEALTHCARE OPTIONS MEDICARE SUPPLEMENT -- Supplemental Policy
Encounter Type:	Outpatient
Patient Class:	0
Patient Complaint:	XR
Point of Care:	Medstar Surgery Center At Lafayette
Primary Diagnosis Code:	
Primary Diagnosis Description:	

## 5.4 Diagnosis Details

The Diagnosis Details contains ICD-10 codes and other diagnostic code information of the event if available.

### Diagnosis Details

Diagnosis Code	Diagnosis Description
I10	Essential primary hypertension
E03.9	Hypothyroidism, unspecified

## 5.5 Encounter History

In Encounter History, you will be able to see encounter history dating back to the last six months for the selected patient.

### Encounter History

GROVE_DEMO, YVETTE Encounter Type: <b>Inpatient</b> Event Time: <b>2024-02-29 09:14</b>	DOB: 1935-06-01 Gender: Female
GROVE_DEMO, YVETTE Encounter Type: <b>Inpatient</b> Event Time: <b>2024-02-29 05:37</b>	DOB: 1935-06-01 Gender: Female
GROVE_DEMO, YVETTE Encounter Type: <b>Inpatient</b> Event Time: <b>2024-01-08 13:41</b>	DOB: 1935-06-01 Gender: Female
GROVE_DEMO, YVETTE Encounter Type: <b>Inpatient</b> Event Time: <b>2023-11-09 09:36</b>	DOB: 1935-06-01 Gender: Female

## 6 Filters

You can create, manage, save, and apply quick filters to the notification list using the 'Quick Filter' bar on the right-hand side of the screen.

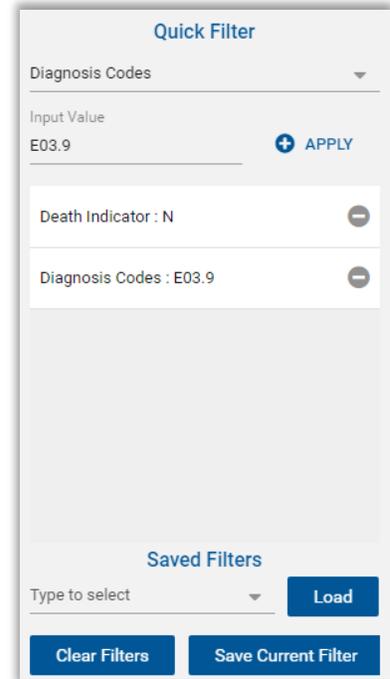
To add a new filter, click "type to select" then begin typing the data element you would like to filter on, select the desired filter criteria, and then click the 'Apply' button to apply that filter. Different selection interfaces will appear depending on the selected data element; for example, a date picker will appear allowing you to set desired date ranges for data elements that represent datetimes.

The current list of notifications will then be automatically filtered according to the created criteria. You can apply as many filters as you like; in the quick filter view, all filters are applied as 'AND' criteria. Appendix A provides a list of all the data elements available for filtering, along with the criteria that can be applied.

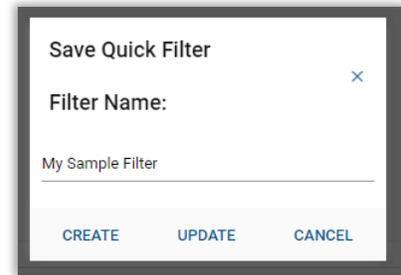
To remove a previously applied filter criteria, navigate to the list of current filters then click the Delete icon next to the filter you would like to remove. To clear all current filters, click the 'Clear Filters' button in the bottom left corner of the Quick Filter pane. This will remove all current filters but will not change or delete any previously saved filters.

To save the current set of filters so that it can be reused later, click the 'Save Current Filter' button in the bottom right corner of the Quick Filter pane. Once saved, you will be able to access the filter under "Saved Filters". Commonly used filters available to all users are called "Global Filters". Global Filters will also appear in this list underneath your personal filters, with a globe icon next to the name indicating that they are global filters.

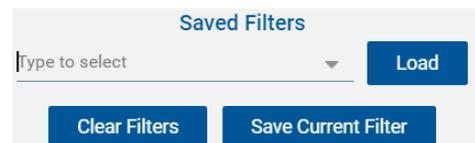
To apply a previously saved filter, select it from the 'Saved Filters' dropdown, then click the 'Load' button. The criteria from the save filter will then appear in the 'Current Filters' list. Note that this will override any filters in place at the time the saved filter was applied.



The screenshot shows the 'Quick Filter' interface. At the top, there is a dropdown menu for 'Diagnosis Codes'. Below it is an 'Input Value' field containing 'E03.9' and a blue '+ APPLY' button. Underneath, there are two filter items: 'Death Indicator : N' and 'Diagnosis Codes : E03.9', each with a minus sign icon to its right. At the bottom, there is a 'Saved Filters' section with a 'Type to select' dropdown and a blue 'Load' button. Below that are two buttons: 'Clear Filters' and 'Save Current Filter'.



The screenshot shows the 'Save Quick Filter' dialog box. It has a title bar with a close button (X). The main content area has a 'Filter Name:' label followed by a text input field containing 'My Sample Filter'. At the bottom, there are three buttons: 'CREATE', 'UPDATE', and 'CANCEL'.



The screenshot shows the 'Saved Filters' interface. It features a 'Type to select' dropdown menu and a blue 'Load' button. Below these are two buttons: 'Clear Filters' and 'Save Current Filter'.

## 7 Data Exports

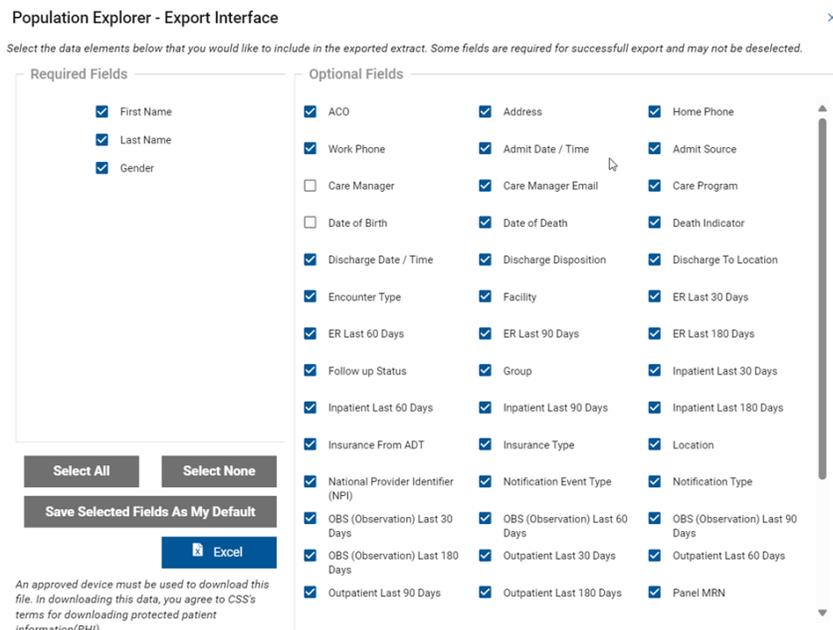
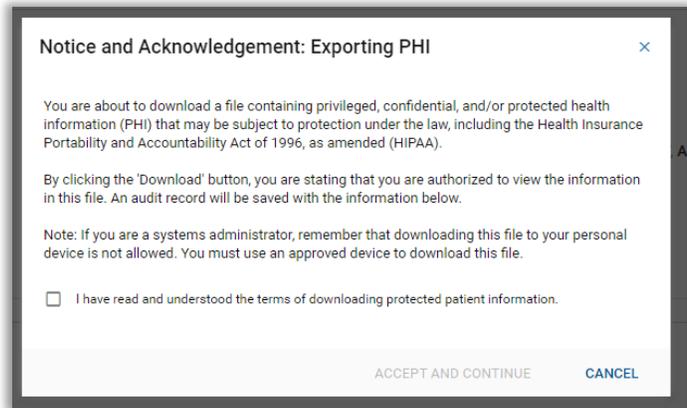
Data can be exported from most views of Population Explorer simply by hitting the 'Export' button. This will allow you to create Excel or PDF versions of the data you are currently viewing, as appropriate.

Prior to exporting, you must read and acknowledge the terms for exporting protected health information. All exports must be handled in accordance with HIPAA and appropriate security safeguards for this type of information.

After agreeing, you will be presented with the Export Interface. This interface allows you to select which fields you would like to include in the created extract by selecting from the available fields. 'Select All' and 'Select None' buttons are made available to quickly change the selection status for all fields. Additionally, you can 'Save Selected Fields As My Default' after making your choices so that the selected fields will auto-select for all future exports that you create. You can always modify the included fields and your defaults at the time of subsequent exports as desired.

Some fields are required to generate the extract; these will be displayed on the left-hand side of the interface but cannot be changed.

After you are done customizing the data fields for the export, simply select the desired export type, PDF or Excel, the extract will be generated, and you will be allowed to save the file locally according to the settings of the internet browser you are using. Some export options (such as the table view) will only allow export via Excel, given the amount of data to be included.

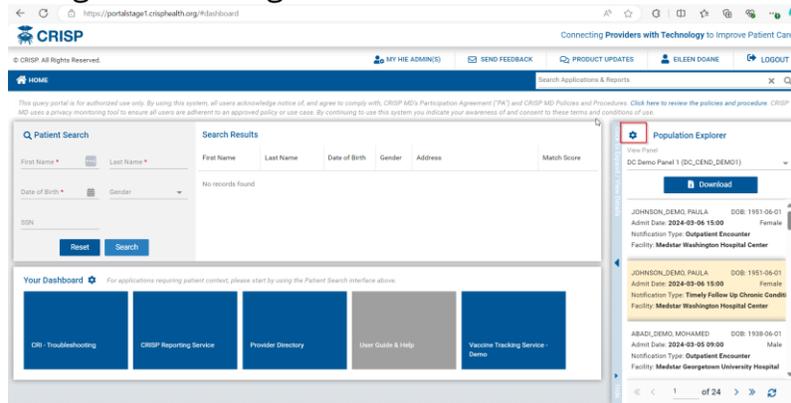


## 8 Advanced Panel Builder

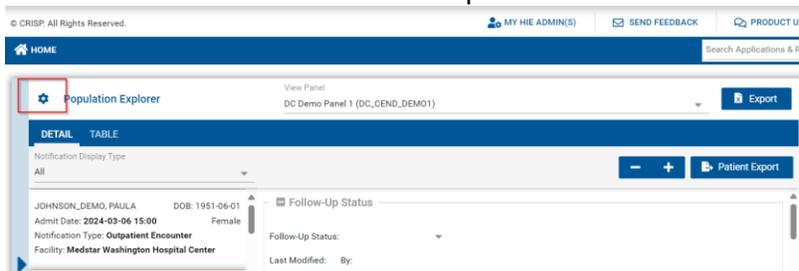
The Advanced Panel Builder (APB) allows users to flexibly create much more complex criteria definitions for filtering patient populations by combining panels and applying Boolean logic operators to any of the data elements available in Population Explorer. This is useful in situations where the Quick Filter functionality does not offer sufficient granularity for targeting a desired set of beneficiaries or events.

The Advanced Panel Builder must be enabled before first use.

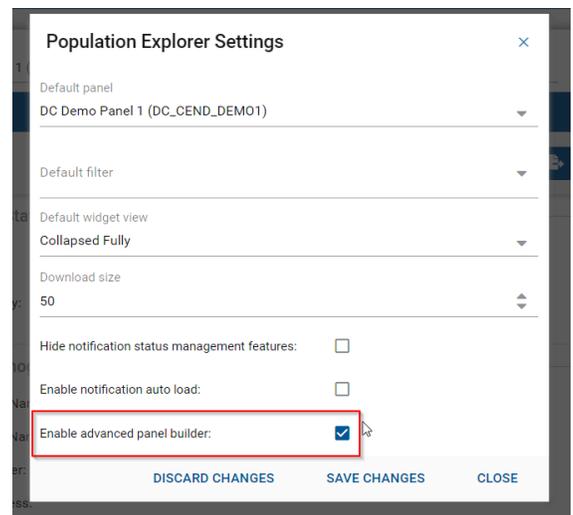
To do this, first navigate to settings menu:



OR in Expanded View

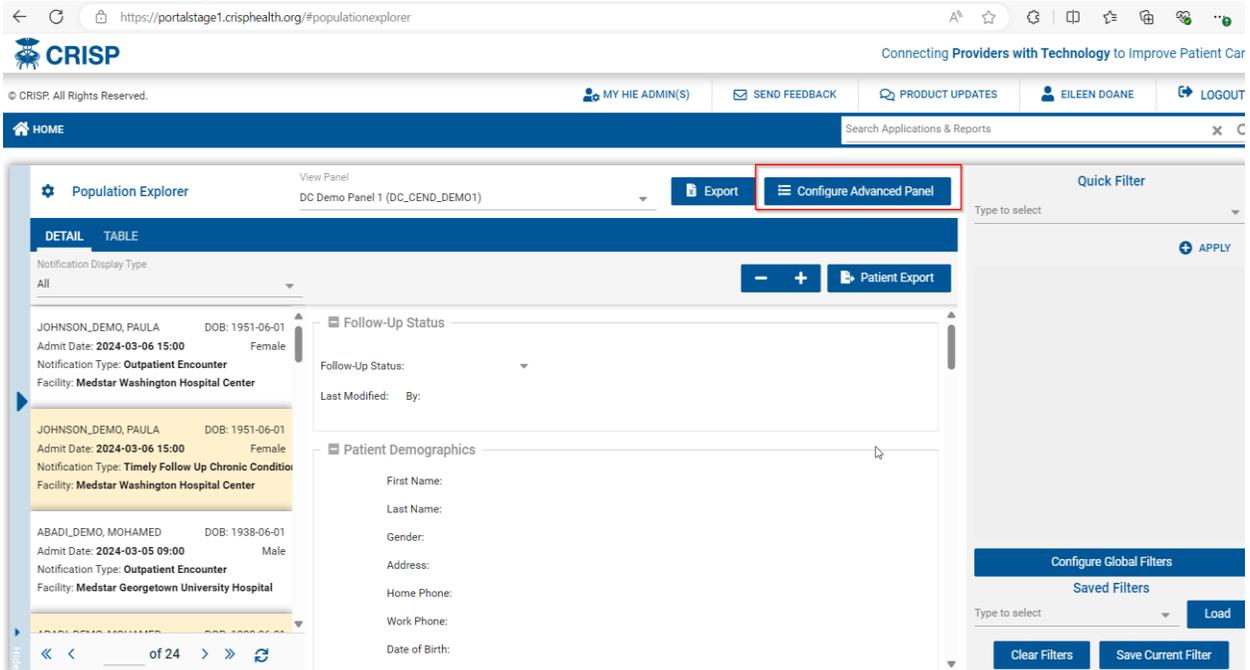


Select "Enable Advanced Panel Builder" and save changes:





“Configure Advanced Panel” is now an option. You will not need to enable Advanced Panel Builder every time you access Population Explorer. This will now be your new default setting.



Now that you have enabled the advanced panel builder, click the ‘Configure Advanced Panels’ button in the upper right corner of the Detail View pane to access it.

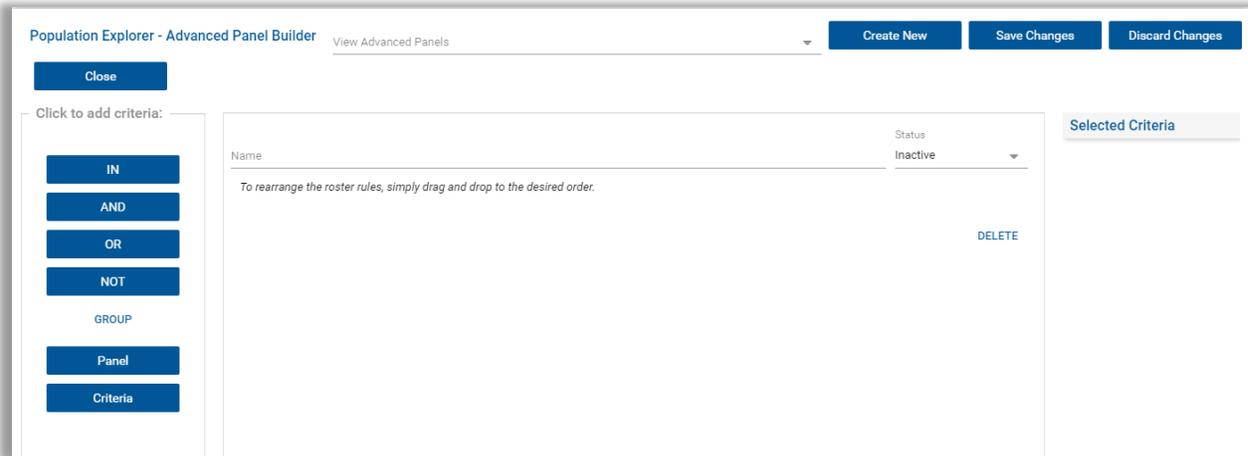


After opening the Advanced Panel Builder, you will be presented with a new APB template, as shown below. To edit an existing advanced panel, select from the ‘View Advanced Panels’ dropdown at the top of the screen. Otherwise, enter the name for your advanced panel and hit ‘Save Changes’ to create a new advanced panel. You can then add criteria as described below.

To discard any unsaved changes on the currently selected panel, hit the ‘Discard Changes’ button. To create a new panel and open a blank APB template after editing or creating a panel, simply click the ‘Create New’ button.

You can set the status of an advanced panel using the Status dropdown to the right of the name field in the creation dialogue interface. Only Active advanced panels will appear in dropdowns throughout the Population Explorer. Set a panel to Inactive if you do not want it to appear in the interface, but do not want to delete it entirely.

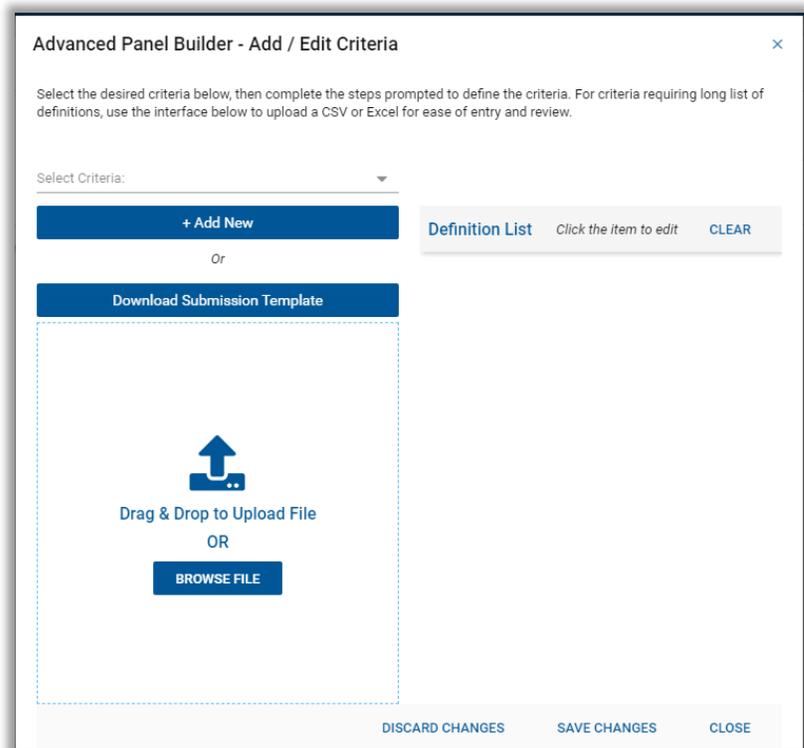
*To learn more, visit our [CEND and Population Explorer website page](#).*



The buttons along the left-hand side of the interface allow you to add panels, criteria, and logical operators to the Advance Panel. Click the 'Panel' button first to add a selection interface that allows you to choose one or more panels as the basis for the advanced panel. Any beneficiaries included on any of the selected panels will be evaluated for inclusion in the advanced panel.

To add a filter criteria, just click the Criteria button. This will bring up an additional interface, shown at right, that allows you to select the data element that will define the criteria, as well as the list of values to be considered. You can manually click on the right-hand side Definition List to add, edit, or remove values, or 'Clear' the list by clicking the corresponding button.

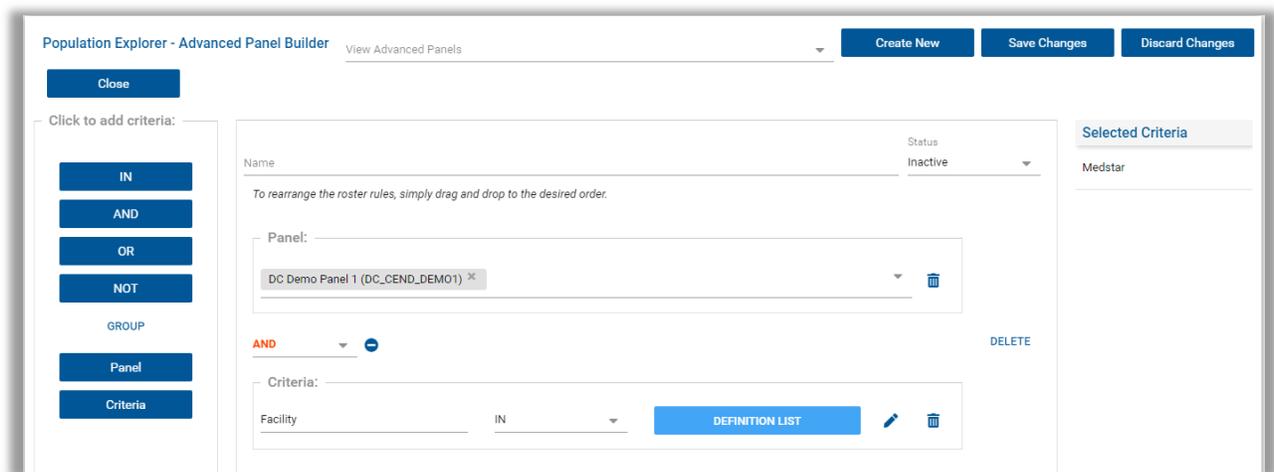
If a data element has a defined set of values, these will pre-populate in the right-hand side of the dialogue box; simply click the trash can icon to remove values which are not wanted. For data elements that include a long criteria list (such as diagnosis codes), you can download a template, populate the values in Excel, and





then upload the populated template to generate the criteria list rather than entering them one by one.

You may add as many criteria as needed to define the advanced panel. Use the logical operators above (IN, AND, OR, NOT) between criteria to join them. If a set of criteria needs to be considered together (for example, “A AND (B OR C)”), use the Group operator to create containing parentheses sets. Any criteria or operators can be dragged and dropped vertically in the UI to re-order them after they have been placed, and clicking the trash can icon or Delete button on the right-hand side of the screen will remove the selected element.



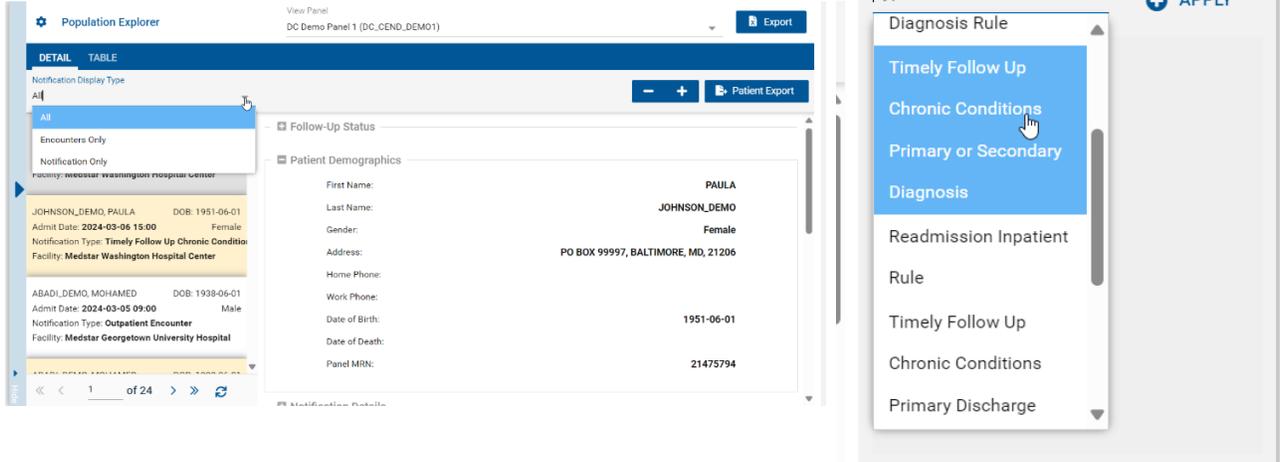
A definition list for any criteria can be viewed by simply clicking the ‘Definition List’ button after it has been created, and likewise, existing definition lists can be edited by clicking the pencil icon next to the Definition List button.

After you are done creating or editing the advanced panel, simply click the ‘Close’ button in the upper left corner to return to the Detail View of Population Explorer.

Please see [Appendix B](#) for step-by-step example of how to create your own filter in Advanced Panel Builder.

## 9 Logic-Based Alerts in Population Explorer

These filters are broken up between encounters and notifications. Users can filter by Logic notification and type, the two critical factors. These filters will display for current subscribers only and can be added as a feature later, as seen below.



The screenshot shows the Population Explorer interface. On the left, a table lists patients with details like name, DOB, admit date, and notification type. On the right, a 'Quick Filter' dropdown menu is open, showing a list of notification types: Diagnosis Rule, Timely Follow Up, Chronic Conditions, Primary or Secondary, Diagnosis, Readmission Inpatient, Rule, Timely Follow Up, Chronic Conditions, and Primary Discharge. The 'Chronic Conditions' option is highlighted.

## 10 Appendix A: Filter Data Elements & Criteria

Below is the list of data elements currently available in the Quick Filter, as well as the criteria that can be applied to each data element type.

### 10.1 Table 1: Filter Data Elements

Note that data elements will only filter if they are present in the underlying encounter data; not all data elements made available in the Population Explorer are fully populated in the originating data feed.

<i>Name</i>	<i>Data Source</i>	<i>Data Type</i>
ASO	Panel	Text
Admit Date/Time	ADT	Date
Admit Source	ADT	Text
Care Manager	Panel	Text
Care Manager Email	Panel	Text
Care Program	Panel	Text
Date of Birth	Panel	Date
Date of Death	ADT	Date
Death Indicator	ADT	Text



Diagnosis Codes	ADT	Alpha-numeric
Diagnosis Descriptions	ADT	Text
Discharge Date/Time	ADT	Date
Discharge Deposition	ADT	Text
Discharge to Location	ADT	Text
Encounter Date	ADT	Date
Facility	ADT	Text
ER Last 30 Days	Calculated field - does not include current visit	Numeric
ER Last 60 Days	Calculated field - does not include current visit	Numeric
ER Last 90 Days	Calculated field - does not include current visit	Numeric
ER Last 180 Days	Calculated field - does not include current visit	Numeric
Facility Type	Mapped from Facility Source Code	Text
Follow Up Status	User defined field	Picklist
Group	Panel	Text
Inpatient Last 30 Days	Calculated field - does not include current visit	Numeric
Inpatient Last 60 Days	Calculated field - does not include current visit	Numeric
Inpatient Last 90 Days	Calculated field - does not include current visit	Numeric
Inpatient Last 180 Days	Calculated field - does not include current visit	Numeric
Insurance From ADT	ADT	Text
Insurance Type	Panel	Text
Location	Panel	Text
MRN	ADT	Alpha-numeric
National Provider Identifier (NPI)	Panel	Numeric
Notification Type	Predefined Alert Type	Picklist
OBS (Observation) Last 30 Days	Calculated field - does not include current visit	Numeric
OBS (Observation) Last 60 Days	Calculated field - does not include current visit	Numeric

*To learn more, visit our [CEND and Population Explorer website page](#).*

OBS (Observation) Last 90 Days	Calculated field - does not include current visit	Numeric
OBS (Observation) Last 180 Days	Calculated field - does not include current visit	Numeric
Outpatient Last 30 Days	Calculated field - does not include current visit	Numeric
Outpatient Last 60 Days	Calculated field - does not include current visit	Numeric
Outpatient Last 90 Days	Calculated field - does not include current visit	Numeric
Outpatient Last 180 Days	Calculated field - does not include current visit	Numeric
Panel MRN	Panel	Alpha-numeric
Patient Class	ADT	Text
Patient Complaint	ADT	Text
Practice	Panel	Text
Primary Care Provider	Panel	Text
Primary Diagnosis Codes	ADT	Alpha-numeric
Primary Diagnosis Description	ADT	Text
Provider	ADT	Text
Risk Methodology 1	Panel	Text
Risk Methodology 2	Panel	Text
Risk Score 1	Panel	Numeric
Risk Score 2	Panel	Numeric

## 10.2 Table 2: Data Type Filter Criteria

<i>Data Element Type</i>	<i>Available Criteria</i>
Boolean	Is, Is Not
Date / Time	Before, After, Exact Date, Range
Code	Equals, Does Not Equal, In, Not In
Fixed Value Set	Equals, Does Not Equal, In, Not In
Free Text	Starts With, Ends With, Contains, Does Not Contain, Equals, Does Not Equal

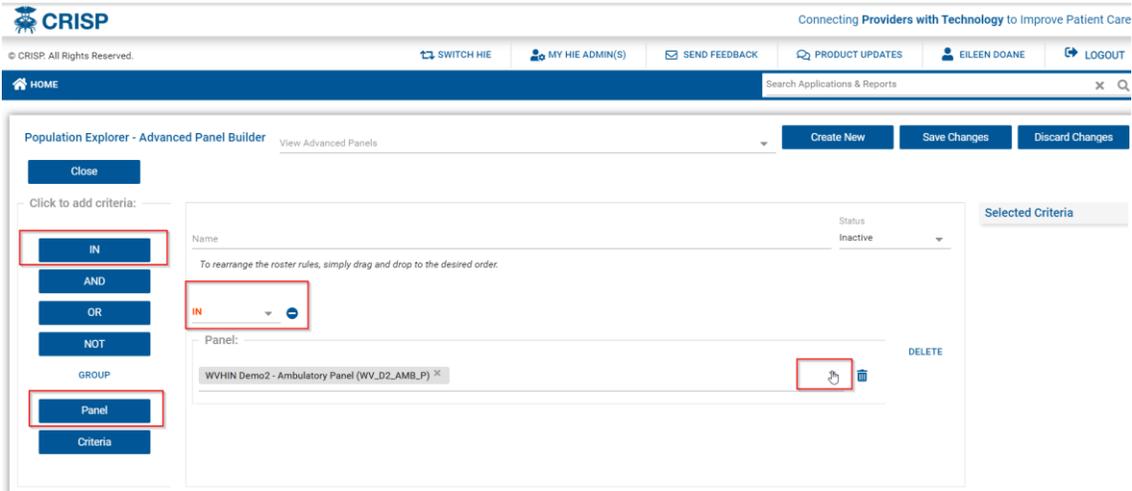
## 11 Appendix B: Advanced Panel Builder Example

Below is a step-by-step example of how to build a filter in Advanced Panel Builder. You can apply any combination of filters to criteria contained in encounters or notifications and customize what is displayed. This tool can be used to include or exclude lists of criteria (i.e. diagnosis codes) or select multiple values to be evaluated and view at one time (i.e. discharges OR admits in the last X number of days).

Step 1: *This step is only for users with multiple panels!* If you have multiple panels and want the criteria to apply to all of them, then skip to step 2.

Start with panel selection:

- Click IN on the left-hand menu
- Click PANEL on the left-hand menu
- Click the drop-down arrow and select the panel(s) you want as your starting patient population.

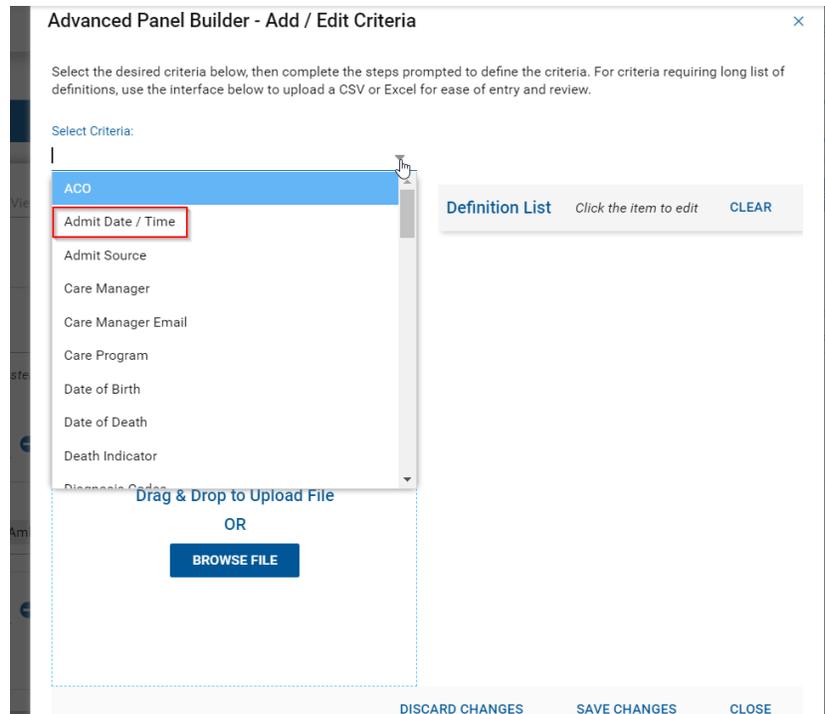


Step 2:

Select any additional filter criteria you would like to place on your patient population. Sample filters are at the end of the guide.

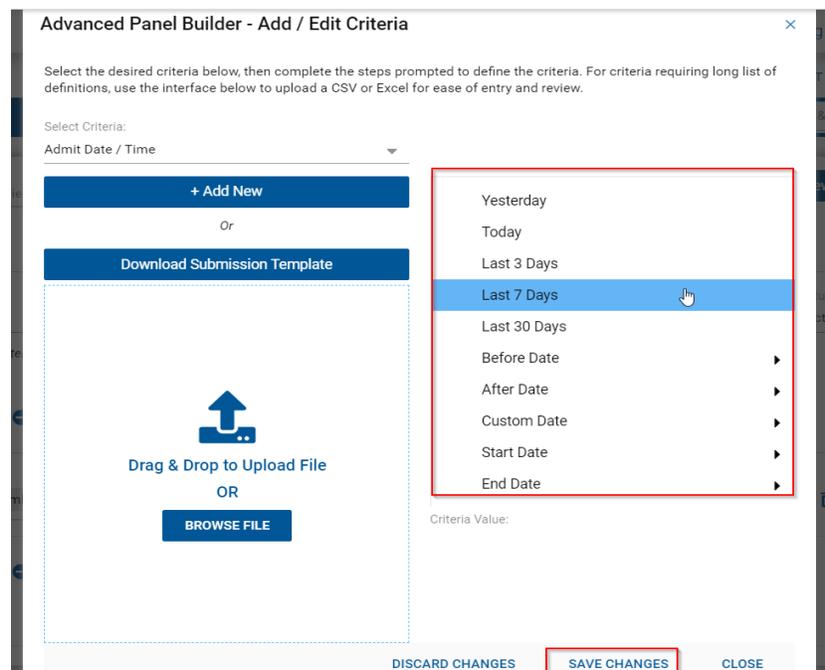
- Click operator (AND, OR)
- If you would like to use multiple criteria, use the GROUP button and begin a parenthesis prior to criteria selection.

- Click CRITERIA on the left-hand menu and select which field you would like to filter on.
- Click the drop-down arrow under "Select Criteria" and scroll down to the criteria you want to select



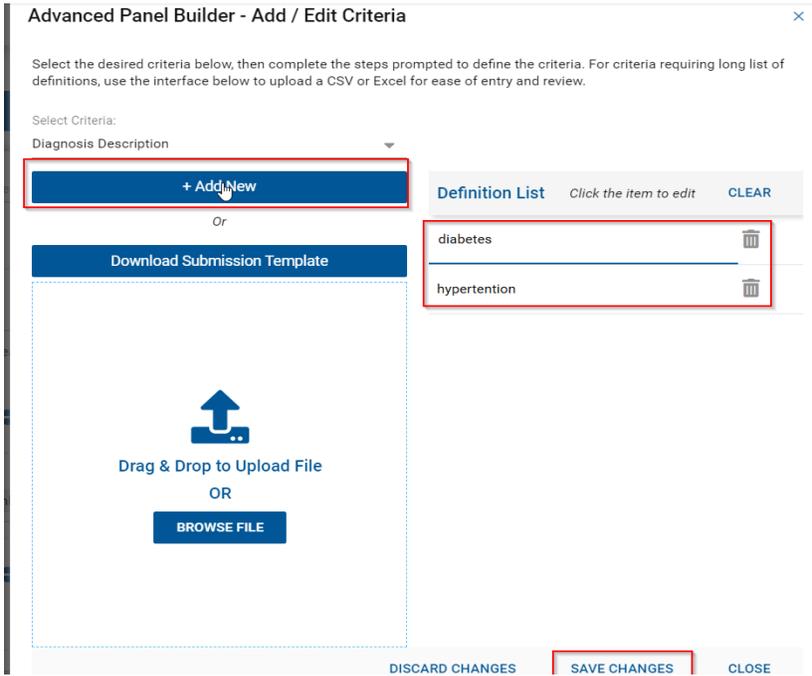
Once you select which criteria you want to add, if the selection is a list, you will be presented with a list of choices.

- Make your selection from the drop-down menu
- Click "Add New"
- Type your entry (NOT case sensitive)
- If you want to add additional entries, click "Add New" and type additional entries
- Repeat as many times as necessary
- If the criteria

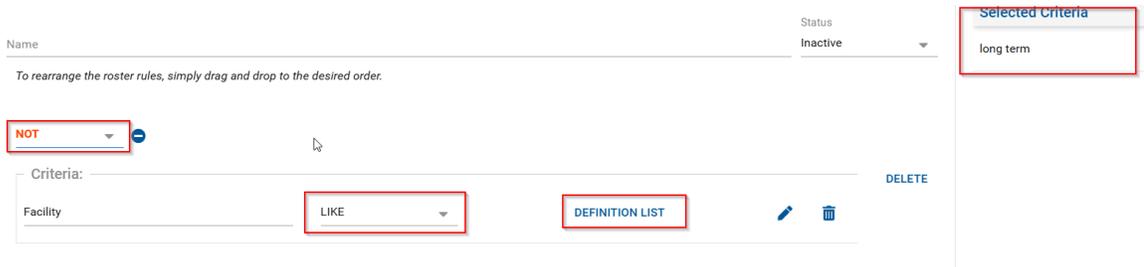


selection is not a predefined picklist, you will enter the definition list (what you would like to filter on – see screenshot below).

- If you have a long list of criteria, you may also Click “Download Submission Template”, enter your multiple criteria (one per row), Save and then use the “Drag and Drop” or “BROWSE FILE” to upload your file. The Definition List will populate with the contents of your file. This feature is especially helpful if you have a list of diagnosis codes.
- Once you click “SAVE CHANGES”, you will be brought back to the Advanced Panel Builder module.
- The default filter will be “IN” which means you want to look for an exact match on your criteria list.
- If you want to do “Contains” rather than an exact match, change the “IN” to “LIKE”



- To view the definitions, you have specified for your criteria, click “DEFINITION LIST” and the definitions will population on the right-hand side of the screen.



- To Exclude values contained in the definition list, click “NOT” before you select your criteria.
- Criteria and operators can be rearranged by dragging and dropping them into the correct spot.