





Pre/Post Visit Level Details User Guide

By CRISP, Last updated 08/2025





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Purpose

The purpose of the user guide is to define and clarify how to navigate the Pre/Post Report. The Pre/Post report help users who have implemented programs to understand hospital utilization before and after a specific enrollment date for the patients in their program within an visit level view. The report allows users to upload a customized panel of patients which they have a treatment relationship with, in order to analyze their hospital utilization data.

General Information

- 1. Individual patients are identified using CRISP EID. The total number of members in the panel is the total number of patients on the panel that were matched to a CRISP EID and not necessarily the number unique patients on the panel. This can happen if invalid MRNs are provided.
- 2. Patients that have opted out and/or have 42-CFR data are excluded from the visit level reports.
- 3. Depending on the number of months selected, some participants might not be included in the analysis if they do not have data for the entire period before and after the analysis
- 4. If the admit date is on or before the program enrollment date, the visit will be considered part of the pre period. If the admit date is after the program enrollment date, then the visit will be considered part of the post period.
- 5. Data for this report follows a one-group pre-post design with no control group. The limitation of this design is the inability to control outside events and not being able to compare results for a similar population with no program exposure.
- 6. Patient mortality is not factored into analysis.
- 7. Patients that do not have hospital visits in MD or do not have hospital utilization will be added to the program but are not factored into analysis.
- 8. Patients that do not have valid EIDs found in the CRISP database will be added to the program but are not factored into analysis.
- 9. Patients that are not found in the Case Mix data ranging after 10/01/2015 will be added to the program but are not factored into analysis.

Data Sources

- 1. Inpatient and Outpatient Case Mix data from the Health Services Cost Review Commission (HSCRC)
- 2. CEND panel information for programs uploaded using panel MRNs

Timeframe

The denominator is based on the program enrollment date provided for each patient on the panel and the date of the most recent case mix data. Inclusion is based on an acceptable amount of Casemix data based on when the panel was submitted.

For example, if the case mix data has been updated through March 31, 2022, and the program enrollment date for MRN 123456 is April 15, 2021, this patient will be a part of the 1-, 3-, and 6-month timeframes but not the 12-month. MRN 123456 will be included in the 12-month timeframe *only after* data has been updated through April 30, 2022, and the patient has been enrolled in the program for a

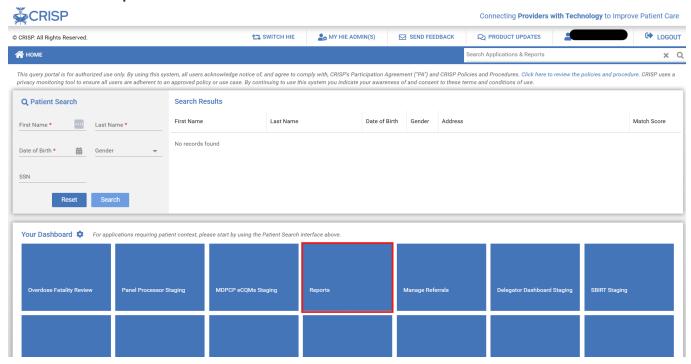




full 12 months. This helps to ensure the denominator is most accurate in representing how long each person has been enrolled in the program.

The recorded monthly period will be the same date each month apart from the enrollment date. For example, Feb 28th is the enrollment date which means Jan 28th is the 1-month period. 1 month before June 15th is May 15th, etc. Data can be filtered by any time period between 1- and 12-month(s).

Pre-Post Report Access



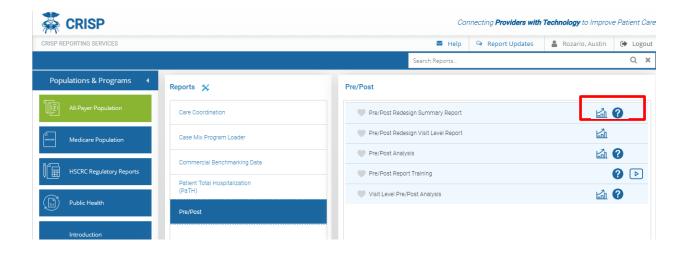
Step 1. The Pre-Post Report can be accessed via the CRISP InContext HIE Portal at https://portal.crisphealth.org by logging-in with your CRISP username and password and clicking the "Reports" card.







Step 2. Once you are in the "Reports" card, a dashboard of various blue cards will appear. *Note that the availability of reports is based on the access granted to the user.* The "All-Payer Population" card will give you the option for the "Pre/Post" tab.



Step 3. Select the Pre/Post tab. This will open a group of subtabs, including the Pre/Post Redesign Summary Report and the Pre/Post Redesign Visit Level Report. Click on the graph icon highlighted in the screenshot above to access the most up to date Tableau dashboard reports. The question icon will provide helpful documentation such as user guides and data dictionaries. The play button next to Pre/Post Report Training plays a webinar recording of Pre-Post User Training.

Note: Pre/Post Redesign Visit Level Report is only available for users with PHI access.

Uploading a New Program

A program can be uploaded on the Pre/Post Analysis subtab using the "New Program" button highlighted below. Programs can be submitted via Hospital MRN, or through the Panel MRN option.

Note: A program can be uploaded with multiple source codes.

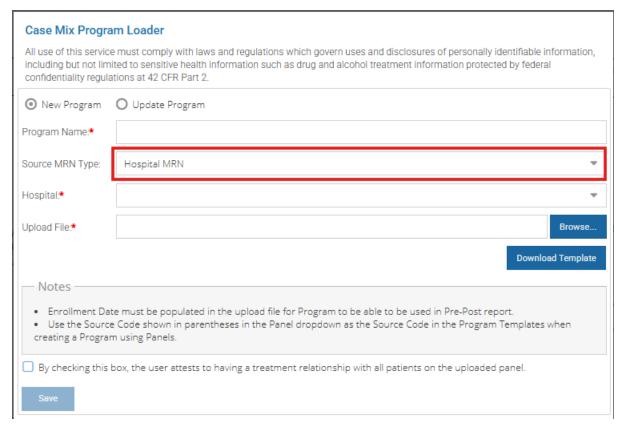


Hospital MRN Panel Submission

1. If you are submitting through the Hospital MRN route, select the corresponding Source MRN Type.







2. Click 'Download Template'



- 3. Insert data into the Pre-Post template. Follow these specifications:
 - a. MRN
 - i. Hospital MRN = Hospital Casemix MRN (should be no letters or leading zeros) which is a unique patient identifier
 - b. Source Code = Unique CRISP Identifier for the Hospital. Hospital source codes are listed at the end of this document.
 - c. Program Enrollment Date = Format date as MM/DD/YYYY

1	MRN	Source Code	Program Enrollment Date
2	123456	CRISP	8/25/2024
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			





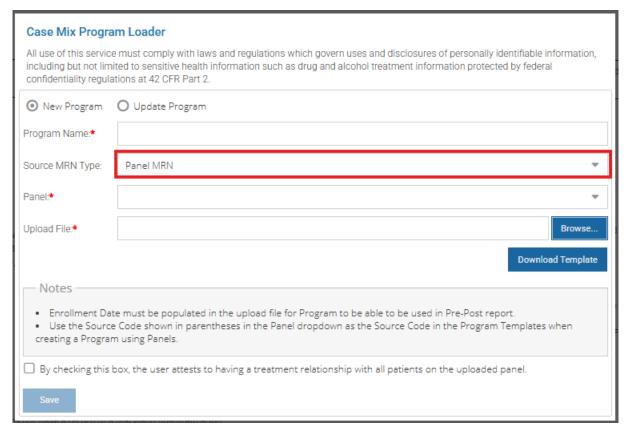
- 4. Save the template onto your device.
- 5. Return to 'Case Mix Program Loader' in the Portal
- 6. Enter a Program Name.
- 7. Select your hospital panel using the dropdown arrow.
- 8. Click 'Browse' to upload the updated template.
- 9. Check the treatment attestation checkbox.
- 10. Click 'Save'
- 11. An error message will pop up if any of the fields in the list were invalid, otherwise a message with the prompt "Upload Successful" will pop up.
- 12. If certain patients cannot be matched, you will have the option of downloading the list of unmatched patients, with an <u>explanation of why the patients were not matched</u>. You will also be able to proceed with a partial upload of matched patients.
- 13. Select the newly created program under 'Program Name' dropdown option on the first tab of the report.

Panel MRN Submission

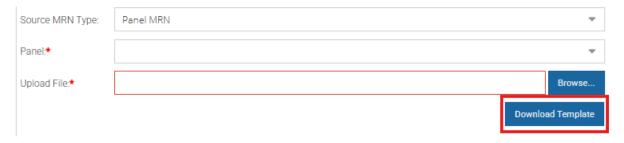
1. If you select the Panel MRN submission route, select the corresponding Source MRN Type.







2. Click 'Download Template'



- 3. Insert data into the Pre-Post template. Follow these specifications:
 - a. MRN
 - i. Panel MRN = MRN submitted on the Panel
 - b. Source Code = CEND Panel identifier.
 - c. Program Enrollment Date = Format date as MM/DD/YYYY

1	MRN	Source Code	Program Enrollment Date
2	123456	CRISP	8/25/2024
3			
4			
5			
6			
7			
8			
9			
10			
11			
12			
13			
14			
15			





- 4. Save the template on your computer.
- 5. Return to 'Program Editor' in the CRS Portal
- 6. Enter a Program Name.

7.

- 8. Select the panel using the dropdown error. Click 'Browse' to upload the newly created template.
- 9. Check the treatment attestation checkbox.
- 10. Click 'Save.'
- 11. An error message will pop up if any of the fields in the list were invalid, otherwise a message with the prompt "Upload Successful" will pop up.
- 12. If certain patients cannot be matched, you will have the option of downloading a list of unmatched patients, with an <u>explanation of why the patients were not matched</u>. You will also be able to proceed with a partial upload of matched patients.
- 13. Select the newly created program under 'Program Name' dropdown option on the first tab of the report.

Error List

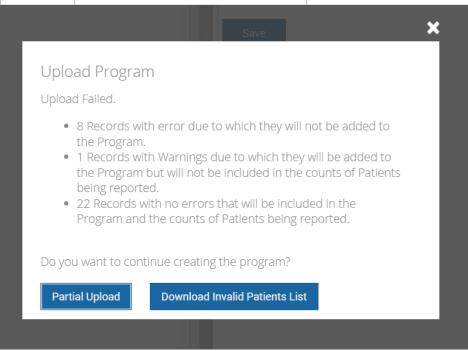
The following table lists and describes the possible errors a user may run into when uploading a program. When users encounter errors 1-6, they will not see the corresponding patients in the program. Errors 7-8 will count patients to be in the program's total denominator, but they will not count towards the analysis shown in the report.

Error Type	Reject Reason	Description
1	Missing MRN	MRN missing
2	Missing Source Code	Source Code missing
3	Duplicate Records Found	Duplicate MRN and Source Code combination





4	Source code Mismatch	Source Code does not match selected panel
5	Invalid Enrollment Date	Invalid enrollment date (must be MM/DD/YYYY format)
6	Enrollment date is before 10/01/2015	Enrollment date cannot be before 11/01/2015
7	Member's EID is not found in CRISP database	No CRISP unique identifier for MRN & Source Code to match with Casemix data
8	Member is not found in Case Mix data from 10/01/2015	Member is not found in Case Mix data. You should only get this message when uploading via Hospital MRN.







Panel Loader Notes

- 1. Some MRNs may be invalid and listed in a separate document after the panel is loaded. This is proper functionality as those MRNs do not exist in our system. Please note that these MRNs have always been invalid (even when CRISP processed the panels).
- 2. The panel loader is sensitive to layout and formatting. Please load the data in the required format with the same column headers that are provided in the template. The file type must be .XLSX; .CSV or other formats will not work.
- 3. Please note that when using a CEND panel, the panels in the report are not updated in real-time. For example, if a CEND panel was updated on 5/1/23, and the report contains CEND panels through 4/30/23, the panel loader may not recognize all the CEND MRNs, especially if those patients are new to the panel. The report will note how updated each data source is. It can take up to a week after a CEND panel is uploaded to be available in Pre/Post.
- 4. You can delete an uploaded panel using the delete button in the program editor. When you select 'Update Panel' in the program editor, select the panel you would like to delete and then click 'Delete'.
- 5. There is also the option to download the patients currently uploaded using the 'Download Patients' button. You can also see the patients uploaded in the program under the Program Patient List tab.

Report Sections

- Program Demographics
- Summary
- By Diagnosis and Service Line Analysis
- By Hospital Analysis
- Time Period Analysis
- Program Patient List
- Visit Level Details





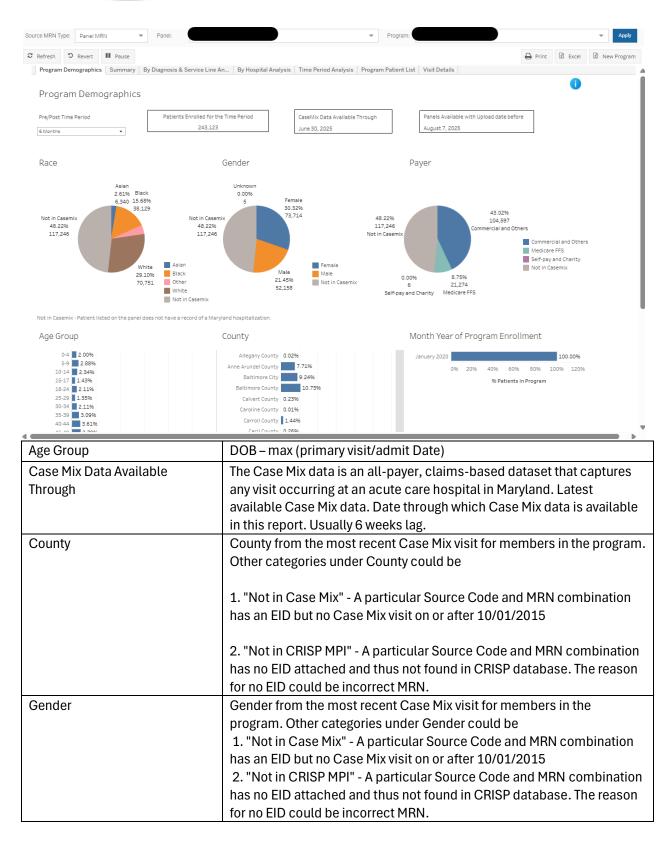
Program Demographics

The Program Demographics Dashboard displays patient demographics for the selected program based on the HSCRC Casemix data. Use Pre/Post Time Period selection to limit the report to patients eligible during a specific time period.

Demographics are based on the most recent visit in Casemix. If there are no demographics in the Casemix data for the patient, the patient will be included in the 'Not in Casemix' category.











Month Year of Program Enrollment	Percentage of members in the program by enrollment Month and Year
Panel Available with Upload date before	Date on which Panel data was last updated.
Patients Enrolled for the Time Period	Total number of patients who have been enrolled long enough to contribute to the analysis for the chosen Pre/Post Time Period. This is the count of members for which the difference between the maximum Case Mix Date and the Enrollment Date is less than the Pre/Post Time Period chosen.
Patients with Case Mix data for the Time period	This is the count of members for which the difference between maximum Case Mix Date and Enrollment Date is less than the Pre/Post Time Period chosen and has Case Mix Discharge Date corresponding to the chosen Pre/Post Time Period.
Payer	Payer from the most recent Case Mix visit for members in the program. Other categories under Payer could be 1. "Not in Case Mix" - A particular Source Code and MRN combination has an EID but no Case Mix visit on or after 10/01/2015 2. "Not in CRISP MPI" - A particular Source Code and MRN combination has no EID attached and thus not found in CRISP database. The reason for no EID could be incorrect MRN.
Pre/Post Time Period Primary Diagnosis (CCS-R	Drop down to restrict the analysis to members who are enrolled in the program for a chosen number of months. The enrollment time period is calculated as difference between enrollment date and most recent Discharge Date in Case Mix data. For example if two months is chosen the analysis is restricted to all the members who have been enrolled for two months when compared to the latest Case Mix data that we have received. A member is included only if data is available for the entire pre and post chosen time period. The CCS-R category corresponds to the primary diagnosis.
Category)	The Goo Weategory corresponds to the primary diagnosis.
Race	Race from the most recent Case Mix visit for members in the program. Other categories under Race could be 1. "Not in Case Mix" - A particular Source Code and MRN combination has an EID but no Case Mix visit on or after 10/01/2015 2. "Not in CRISP MPI" - A particular Source Code and MRN combination has no EID attached and thus not found in CRISP database. The reason for no EID could be incorrect MRN.





Summary

The Summary tab displays the Pre/Post results for the selected program and time period. All Patients, including those without a visit, are in the denominator. For report inclusion, patients must be enrolled for the time period length based on the Casemix through date. For example, patients with a program enrollment date of 1/1/2024 need Casemix data through 2/1/2024 to be counted in the one-month Pre/Post analysis.

Pre/Post was designed to provide a high-level overview of your program. Pre/Post does not provide a control group or control for any confounding factors. Any conclusions made are up to the discretion of the user

Line Graph: The line graph displays the measure for each month. For example, 5 months post displays the number of visits that occurred between 4-5 months after the program enrollment date. 6 months post displays the number of visits that occurred between 5 and 6 months after the program enrollment date.







Measure	Visits - Applying filter will restrict dashboard to total number of unique visits belonging to IP (Inpatient visits), ED (OP visits with ED charges), OBS>23 (OP visits with observation charges greater than 23 hours only), OP (all other visits that do not fall in the other three categories) for different possible time periods
	Patients - Applying filter will restrict dashboard to total number of members belonging to IP (Inpatient visits), ED (OP visits with ED charges), OBS>23 (OP visits with observation charges greater than 23 hours only), OP (all other visits that do not fall in the other three categories) for different possible time periods
	Charges - Applying filter will restrict dashboard to total charges belonging to IP (Inpatient visits), ED (OP visits with ED charges), OBS>23 (OP visits with observation charges greater than 23 hours only), OP (all other visits that do not fall in the other three categories) for different possible time periods
	Average Charges per Visit - Applying filter will restrict dashboard to (total charges/total visits) belonging to IP (Inpatient visits), ED (OP visits with ED charges), OBS>23 (OP visits with observation charges greater than 23 hours only), OP (all other visits that do not fall in the other three categories) for different possible time periods
	Charges per 1000 Visits - Applying filter will restrict dashboard to (total charges/total visits)*1000 belonging to IP (Inpatient visits), ED (OP visits with ED charges), OBS>23 (OP visits with observation charges greater than 23 hours only), OP (all other visits that do not fall in the other three categories) for different possible time periods
Most Recent Payer	Payer from the most recent Case Mix visit for members in the program.
Program Name-Source	This field combines the 'Program Name' from the panel data with its associated 'Source'.
Visit Summary	Total Visits - Total number of visits belonging to IP (Inpatient visits), ED (OP visits with ED charges), OBS>23 (OP visits with observation charges greater than 23 hours only), OP (all other visits that do not fall in the other three categories) for different possible time periods
	Inpatient Visits - Total number of visits IP (Inpatients visits) only
	ED Visits - Total number of visits ED (OP visits with ED charges) only
	OP Visits (Excluding ED) - Total number of visits OP (Excluding ED)





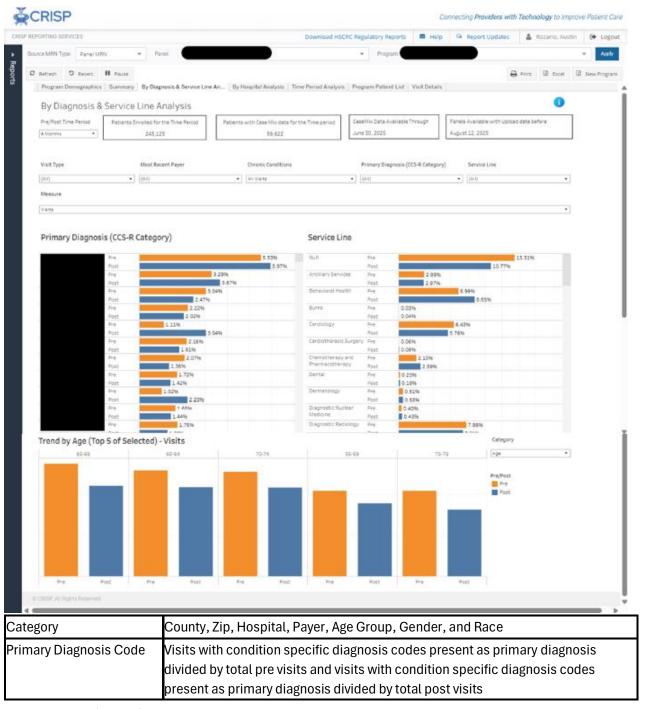
Visit Type	At visit-level : ED (OP visits with ED charges) , IP (Inpatient visits), OBS > 23 (OP
	visits with observation charges greater than 23 hours only), OP (all other visits
	that do not fall in the other three categories)

By Diagnosis and Service Line Analysis

The Diagnosis Analysis tab allows users to view the most frequent primary diagnoses Pre and Post the program enrollment date. The primary diagnoses are grouped based on CCS-R category.





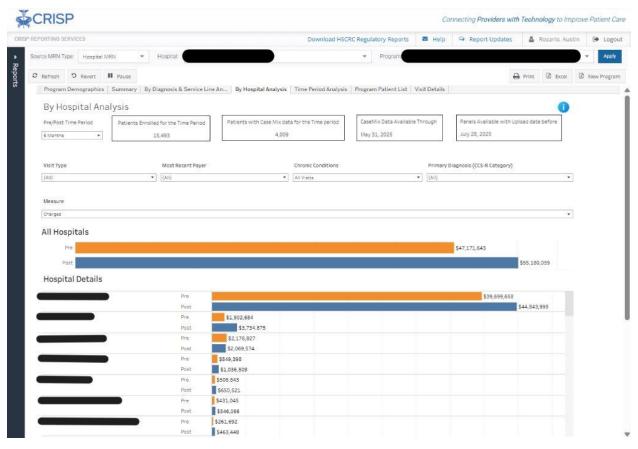


By Hospital Analysis

The By Hospital Analysis tab displays the hospitals that the patients visited Pre and Post enrollment. This tab allows users to see totals at each hospital from patients listed in the panel, filtered by different categories.







Hospital Details	Based on the filters applied to the dashboard user will see hospital wise pre and post details
Measure	Visits - Applying filter will restrict dashboard to total number of unique visits belonging to IP (Inpatient visits), ED (OP visits with ED charges), OBS>23 (OP visits with observation charges greater than 23 hours only), OP (all other visits that do not fall in the other three categories) for different possible time periods
	Patients - Applying filter will restrict dashboard to total number of members belonging to IP (Inpatient visits), ED (OP visits with ED charges), OBS>23 (OP visits with observation charges greater than 23 hours only), OP (all other visits that do not fall in the other three categories) for different possible time periods
	Charges - Applying filter will restrict dashboard to total charges belonging to IP (Inpatient visits), ED (OP visits with ED charges), OBS>23 (OP visits with observation charges greater than 23 hours only), OP (all other visits that do not fall in the other three categories) for different possible time periods
	Average Charges per Visit - Applying filter will restrict dashboard to (total charges/total visits) belonging to IP (Inpatient visits), ED (OP visits with ED charges),





OBS>23 (OP visits with observation charges greater than 23 hours only), OP (all other visits that do not fall in the other three categories) for different possible time periods

Charges per 1000 Visits - Applying filter will restrict dashboard to (total charges/total visits)*1000 belonging to IP (Inpatient visits), ED (OP visits with ED charges), OBS>23 (OP visits with observation charges greater than 23 hours only), OP (all other visits that do not fall in the other three categories) for different possible time periods

Readmissions Visits - Applying filter will restrict dashboard to total number of readmissions belonging to IP for different possible time periods

PAU Visits - Applying filter will restrict dashboard to total number of potentially avoidable utilization measures belonging to IP and OBS>23 for different possible time periods

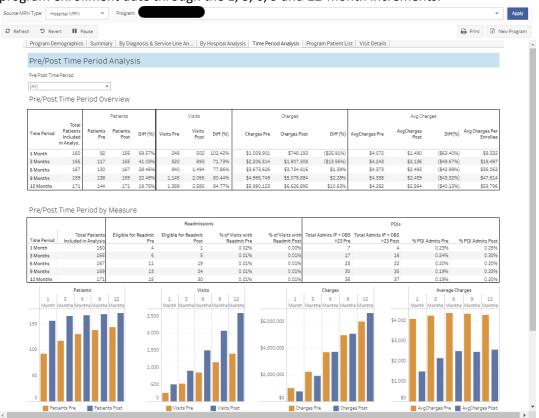
PAU Charges - Applying filter will restrict dashboard to total amount of potentially avoidable utilization charges belonging to IP and OBS>23 for different possible time period





Time Period Analysis

The Pre/Post Time Period Analysis tab allows users to compare totals and averages Pre and Post the program enrollment date through the 1, 3, 6, 9 and 12-month increments.



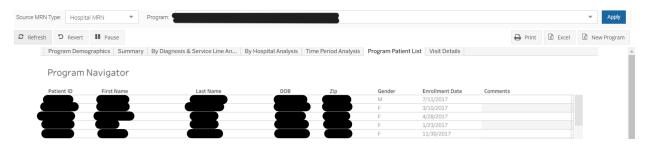
PQIs	A Prevention Quality Indicator (PQI) is a measure used to identify hospital admissions that could potentially have been prevented with effective outpatient care or early intervention	
Pre/Post Time Period	The Pre/Post Time Period Analysis tab allows users to compare totals and averages	
Analysis	Pre and Post the program enrollment date through the 1, 3, 6, 9 and 12-month	
	increments.	
Pre/Post Time Period	Comparative totals of patients, visits, charges, and average charges Pre and Post	
Overview	the program enrollment date based on the Pre/Post time periods.	
Pre/Post Time Period by	Comparative totals of readmissions and PQIs Pre and Post the program enrollment	
Measure	date based on the Pre/Post time periods.	
Readmissions	A readmission occurs when a patient is admitted to a hospital within 30 days after a	
	recent discharge	





Program Patient List

The Program Patient List tab provides the list of patients for the selected program. The information displayed is based on the panel uploaded to CRISP. The comments section provides information on the patient inclusion in the analysis.







Visit Details

The visit details section enables you to view visit level information for patients for up to 12 months pre and post enrollment in the program. The Crosstab button allows you to download the table into excel to perform calculations. For more detailed information on the variables, see the metric definitions section. Users can hover over the details hyperlink to view the additional fields such as diagnosis code descriptions, patient age, and last expected payer.

Please note: This is only available to viewers with PHI access



Tips for Analyzing the Visit Details Data: The visit level data does not exclude patients who have not been enrolled for the full analysis period. This is to provide users the most available data. It is important to note that the results in the visit level pre-post report will not match the patient counts in the summary and panel analysis tabs because visit level data is all inclusive whereas pre-post report data only uses patients who have met the enrollment criteria/deadline.

- For example, if you are looking at 3-month pre-post data, with data through 12/31/2023, and a patient enrolled on 11/1/2024:
 - All visits in the three months prior will show
 - All visits in the two months post will show
- o In the Program Demographics and Summary tabs, this patient would have been excluded because they do not have the full data run out for 3 months post.





Definitions/Acronym List

Filter/Measure Definitions

Filter/Measure	Definition
Age Group	DOB – max (Discharge Date)
CaseMix Data Available Through	The Case Mix data is an all-payer, claims-based dataset that
	captures any visit occurring at an acute care hospital in Maryland.
	Latest available Case Mix data. Date through which Case Mix data
	is available in this report. Usually 6 weeks lag.
Category	County
	Zip
	Hospital
	Payer
	Age Group
	Gender
	Race
Chronic Conditions	Applying filter will restrict dashboard to only members with the
	specified chronic condition. Members are flagged with chronic
	conditions if they have the appropriate diagnosis codes in Case
	Mix data, using CMS Chronic Condition Warehouse methodology.
	Calculated at the patient-level.
County	County from the most recent Case Mix visit for members in the
•	program. Other categories under County could be
	1. "Not in Case Mix" - A particular Source Code and MRN
	combination has an EID but no Case Mix visit on or after
	10/01/2015
	2. "Not in CRISP MPI" - A particular Source Code and MRN
	combination has no EID attached and thus not found in CRISP
	database. The reason for no EID could be incorrect MRN.
Enrollment Status	Enrollment Status
Gender	Gender from the most recent Case Mix visit for members in the
	program. Other categories under Gender could be
	1. "Not in Case Mix" - A particular Source Code and MRN
	combination has an EID but no Case Mix visit on or after
	10/01/2015
	2. "Not in CRISP MPI" - A particular Source Code and MRN
	combination has no EID attached and thus not found in CRISP
	database. The reason for no EID could be incorrect MRN.
Hospital Details	Based on the filters applied to the dashboard user will see hospital
·	wise pre and post details
Measure	Visits - Applying filter will restrict dashboard to total number of
	unique visits belonging to IP (Inpatient visits) , ED (OP visits with
	ED charges), OBS>23 (OP visits with observation charges greater





than 23 hours only), OP (all other visits that do not fall in the other three categories) for different possible time periods

Patients - Applying filter will restrict dashboard to total number of members belonging to IP (Inpatient visits), ED (OP visits with ED charges), OBS>23 (OP visits with observation charges greater than 23 hours only), OP (all other visits that do not fall in the other three categories) for different possible time periods

Charges - Applying filter will restrict dashboard to total charges belonging to IP (Inpatient visits), ED (OP visits with ED charges), OBS>23 (OP visits with observation charges greater than 23 hours only), OP (all other visits that do not fall in the other three categories) for different possible time periods

Average Charges per Visit - Applying filter will restrict dashboard to (total charges/total visits) belonging to IP (Inpatient visits), ED (OP visits with ED charges), OBS>23 (OP visits with observation charges greater than 23 hours only), OP (all other visits that do not fall in the other three categories) for different possible time periods

Charges per 1000 Visits - Applying filter will restrict dashboard to (total charges/total visits)*1000 belonging to IP (Inpatient visits), ED (OP visits with ED charges), OBS>23 (OP visits with observation charges greater than 23 hours only), OP (all other visits that do not fall in the other three categories) for different possible time periods

Readmissions Visits - Applying filter will restrict dashboard to total number of readmissions belonging to IP for different possible time periods

PAU Visits - Applying filter will restrict dashboard to total number of potentially avoidable utilization measures belonging to IP and OBS>23 for different possible time periods

PAU Charges - Applying filter will restrict dashboard to total amount of potentially avoidable utilization charges belonging to IP and OBS>23 for different possible time period

Source Codes

Account Name	Source Code
Adventist Rehabilitation Hospital of Maryland	ARHM
Anne Arundel Medical Center	AAMC





Ascension Saint Agnes Hospital	SAH
Atlantic General Hospital	AGH
Calvert Health Medical Center	CVMH
Carroll Hospital Center	СНС
Christiana Care Health Services	CCHS
Doctors Community Hospital	DCH
Fort Washington Medical Center	FWMC
Frederick Memorial Hospital	FMH_ID
Garrett Regional Medical Center	GCMH
Grace Medical Center	GMC
Greater Baltimore Medical Center	GBMC
Holy Cross Hospital	НСН
Holy Cross Hospital Germantown	HCH_GT
Howard County General Hospital	HCGH
Johns Hopkins Bayview Medical Center	JHH_BVIEW
Johns Hopkins Hospital	ЈНН
Medstar Franklin Square Medical Center	MEDSTAR_FSH
Medstar Good Samaritan Hospital	MEDSTAR_GSH
Medstar Harbor Hospital	MEDSTAR_HHC
Medstar Montgomery Medical Center	MGH
Medstar Southern Maryland Hospital Center	SMH
Medstar St. Mary's Hospital	STMH
Medstar Union Memorial Hospital	MEDSTAR_UMH
Mercy Medical Center	MHS
Meritus Medical Center	ммс
Mt. Washington Pediatric Hospital	MWPH
Northwest Hospital Center	LBH_NWH
Shady Grove Adventist Hospital	ADVSGAH
Sinai Hospital of Baltimore	LBH_SHB
Suburban Hospital	SUBURBAN
Tidalhealth McCready Pavilion	МСМН
Tidalhealth Peninsula Regional Medical Center	PRMC
Baltimore Washington Medical Center	UMMS_BWMC
University of Maryland Charles Regional Medical Center	СМС
University of Maryland Laurel Regional Hospital	LRH
University of Maryland Medical Center (UMMC)	UMMS_UMMC
University of Maryland Medical Center Midtown Campus	UMMS_MGH
University of Maryland Prince George's Hospital Center	PGHC





University of Maryland Rehabilitation	
and Orthopaedic Institute	UMMS_KERNAN
University of Maryland Shore Medical Center at Chestertown	UMMS_CHSTR
University of Maryland Shore Medical Center at Easton	UMMS_EASTON
University of Maryland Shore Medical Center Dorchester	UMMS_DRCHSTR
University of Maryland St. Joseph Medical Center	SJMC
Upper Chesapeake Medical Center	UCMC
Washington Adventist Hospital	ADVWAH
Western Maryland Health System	WMHS