



CRISP

Patient Total Hospitalization (PaTH) User Guide

By CRISP, last updated 8/17/2021



CRISP

Table of Contents

Patient Total Hospitalization Dashboard (PaTH)	3
Background.....	3
Use Cases.....	3
Data Source	3
Measures	4
User Guide.....	5
Tableau PaTH Access/Card	5
Tableau Features	7
Uploading a Program.....	8
Tableau Filters	11
Report Sections	12
1. Summary.....	13
2. PaTH.....	14
3. Patient Details	15
Table 1 – Source Codes	16
CRISP Contact Information.....	17



Patient Total Hospitalization Dashboard (PaTH)

Background

The Patient Total Hospitalization Report (PaTH) was developed to provide hospital and ambulatory users a report to view cross hospital charge data for patients in the last 36 months. PaTH provides an overview of hospital utilization and charges. Users can also drilldown to a specific patient population with the patient condition, demographic, and hospital utilization filters. Users can generate patient lists using the report's filter to view hospital charges with an option to export the data. Users can additionally create programs based on their ENS Panels in PaTH or Case Mix Program Loader, and users will be able to view the programs in PaTH and Pre/Post.

Use Cases

1. Study your overall population by geographic locations and/or chronic conditions, by age group.
2. Load a panel of patients who have received support from hospital and/or community programs (or combined programs):
 - a. To study how their costs and utilization compare to the overall population in # 1.
 - b. To study the population of patients who have received a program or service(s)
3. Load a panel that represents patients who were referred to a program or service, and compare it to those who actually participated in the service (# 2 above).
4. Use the PaTH export to further study and analyze patients in any of the above panels.
5. Remember that panels loaded in PaTH can also be loaded/used in the Pre/Post Report which also has powerful data to show utilization, costs and types of visits before and after a program/service was provided. Pre/Post also has different data in the export, including whether the visits were pre or post enrollment date, PAU, PQI, Readmission Index Visit, Readmission Visit start date and various visit-level diagnoses.

Data Source

The data used in this report includes charges from all Maryland hospitals (referred to as Case Mix data). All Maryland hospitals provide their Case Mix data to the HSCRC which includes all-payer financial and patient-level administrative information for all inpatient and emergency visits, observation visits greater than 24 hours, and outpatient visits that occurred in regulated space. This report does not include out-of-state visits for Maryland residents, and does not include charges for outpatient visits that occurred in non-regulated space.



Measures

Measure	Definition
IP, OBV, ED Visits	Count of all Maryland hospital Inpatient, Observation, and/or ED visits
Patients	Count of unique patients
Charges	Total charges for visits
Charges per Patient	Average charges per patient
Charge per Visit	Average charges per visit
Visits per Patient	Average number of visits per unique patients
ADI	Area Deprivation Index is based on a measure created by the Health Resources & Services Administration (HRSA) over three decades ago, and has since been refined, adapted, and validated to the Census Block Group neighborhood level by Amy Kind, MD, PhD and her research team at the University of Wisconsin-Madison. It is utilized as a proxy measure for socioeconomic status to capture patient-level social risk factors not currently available in clinical information systems
All Hospital Charge	Total all-payer charges for visits
All Hospital Visits	Total number of visits at hospitals
Hospital	Number of unique hospitals visited
PQI	The Prevention Quality Indicators (PQIs) are a set of measures developed by the Agency for Healthcare Research and Quality (AHRQ) that can be used with hospital inpatient discharge data to identify ambulatory care sensitive conditions in adult populations

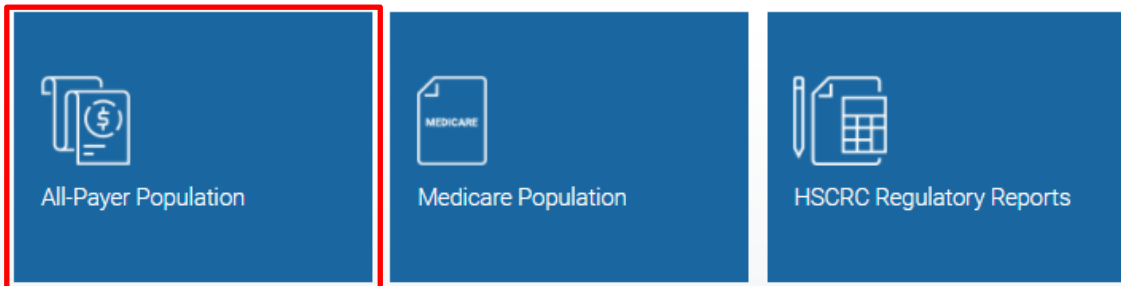


CRISP

User Guide

Tableau PaTH Access/Card

Step 1. To access the All-Payer Population tile, login to the CRISP Reporting Services Portal by visiting <https://reports.crisphealth.org>. Once in the CRS Portal, a dashboard of different blue report “cards” will appear. Availability of reports is based on the access of the user. Clicking the card named “All-Payer Population” will bring up the available reports for this category. The following screenshots represent the user’s workflow.





CRISP

Step 2. By clicking the Tableau icons as shown below, you will either access the PaTH Summary or PaTH Details Report. Users with PHI-level access to this report will have the PaTH Details report option. Users who can only see the PaTH Summary report (and not the PaTH Details report) are configured for summary level access (cannot see PHI reports).

The question mark icon will allow you to access documentation such as user guides and data dictionaries where applicable.

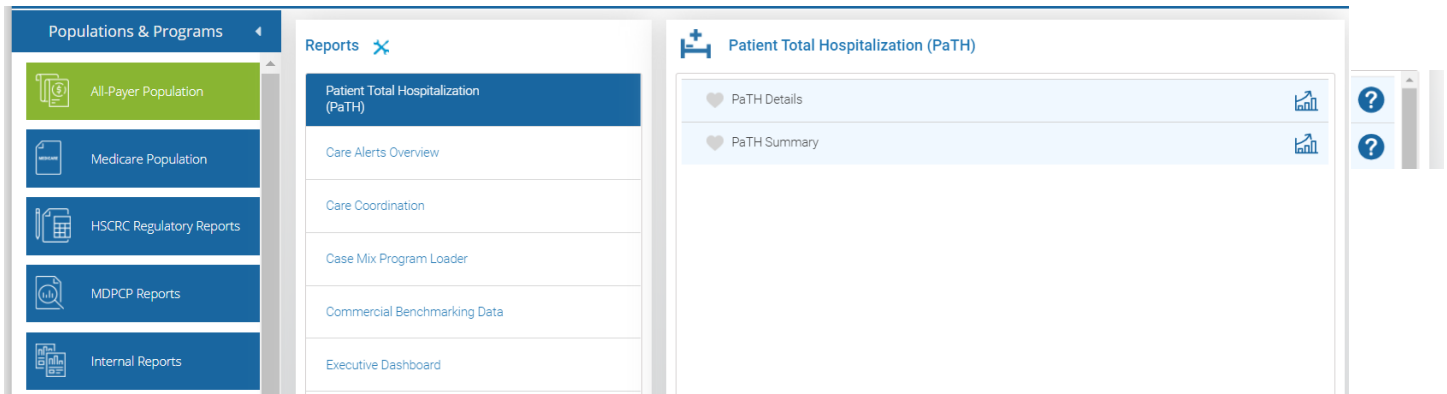




Tableau Features

On each Tableau dashboard, there are menu options for the user to select, which are listed below. Additionally, the Tableau report contains multiple dashboards. The available dashboards are listed at the top.

The screenshot shows a Tableau dashboard interface. At the top, there are filter fields for 'Source MRN Type', 'Hospital', and 'Program'. The 'Hospital' field is set to '(Old) Johns Hopkins Oncology - 210904' and the 'Program' field is set to 'ALL'. Below these fields are buttons for 'Apply', 'Refresh', 'Revert', and 'Pause'. To the right of these buttons are 'Print' and 'New Program' buttons, both of which are highlighted with a red box. At the bottom of the dashboard, there is a navigation bar with tabs for 'Summary', 'PaTH', and 'Patient Detail', which are also highlighted with a red box.

Menu Option	Description
Refresh	The refresh button is used to refresh the data source used by the Tableau report
Revert	The revert button restores the report to its default view, undoing all user selections and/or filtering
Pause/Resume	To save time when setting multiple filters, use the Pause button to suspend the report refresh, select filters, then select Resume, which applies the filters and refreshes the report. By pausing the layout update, the report is not reloaded for <u>each</u> filter change.
Help	This button opens the Tableau user guide
Print	This button generates a PDF from the selected tabs in Tableau. A print menu with various export options is provided. The user can print multiple tabs with the desired filters and has options to adjust the page scaling, paper size, and paper orientation.
Excel/Crosstab	The Excel or crosstab option allows users to export a dataset into an Excel workbook or CSV file. Note that Excel extracts may provide additional columns that may not be present in the Tableau workbook that is displayed on the screen. Excel exports can be done using no filters (to study a population or panel), or the user can set filters and export to excel to study a subset of a population or panel.



CRISP

Uploading a Program

Program Loader

Users can upload a program in two places:

1. The Case Mix Program Loader, located in the All-Payer Population report section, allows users to create programs in one central place. Users can view uploaded programs in both Pre/Post and PaTH reports.

The screenshot shows the CRISP web application interface. The top navigation bar includes the CRISP logo, the tagline "Connecting Providers with Technology to Improve Patient Care", and user information for Kaeding, Grace. The main content area is divided into a left sidebar and a main panel. The sidebar, titled "Populations & Programs", lists various report categories, with "All-Payer Population" highlighted in green. The main panel, titled "Reports", lists several report types, with "Case Mix Program Loader" highlighted in red. The "Case Mix Program Loader" form includes a "New Program" radio button (selected) and an "Update Program" radio button. It has fields for "Program Name*", "Source MRN Type" (set to "Hospital IIRN"), and "Hospital*". There is an "Upload File*" field with a "Browse..." button and a "Download Template" button. A note states: "Note: Enrollment Date must be populated in the upload file for Program to be able to be used in Pre-Post report." Below the note is a checkbox for attesting to a treatment relationship and a "Save" button.



2. The 'New Program' button in the PaTH Reports lets users upload programs. Users can view the programs uploaded in PaTH in both PaTH and Pre/Post. Although the same template is used to load PaTH and Pre/Post panel, PaTH does not 'use the Program Enrollment date. It just uses the MRN's and the source code.

The screenshot shows the top navigation bar of the CRISP application. It includes a search bar for 'Source MRN Type' (set to 'Hospital MRN'), a dropdown for 'Hospital' (set to 'ALL, 210001 - Meritus Medical Center, ...'), and a dropdown for 'Select Program' (set to 'ALL, djr_jhbmhc_hf_kpmrXche'). To the right of these are buttons for 'Apply', 'Refresh', 'Revert', 'Pause', 'Print', 'Excel', and 'New Program'. The 'New Program' button is highlighted with a red rectangle. Below the navigation bar, there are tabs for 'Summary', 'PaTH', and 'Patient Detail'. The main content area displays the title 'Patient Total Hospitalizations Dashboard' and a subtitle 'Patient Detail Sorted by Raw MRN'.

Creating a Panel for PaTH or Pre/Post

Download the Template and keep a copy of the blank template for future panel creation. The template includes three columns: MRN, Source Code and Program Enrollment.

MRN – hospital MRN or ENS Panel MRN

Source Code – select your source code from **Table 1**. If you do not see your organization in the Source Code table, please contact support@crisphealth.org and request creation of a source code.

Program Enrollment Date – the date the patient started the program (used by Pre/Post but not used by PaTH).

The patient MRN and Panel Source is based on the ENS Panel. The ENS Panel submitted by the provider is required to have either a hospital MRN or a practice specific MRN in order to provide each patient with a unique identifier.

Loading a Panel for PaTH or Pre/Post

Enter a Program Name. Since PaTH Summary Report panels will be displayed in the drop-down list alphabetically by name, it is helpful to use a standard naming convention that includes the name of the program and the start and end dates of the panel contents.

Select the Source MRN Type - Hospital MRN or ENS Panel MRN

Hospital – select the hospital or organization

Upload File – use browse to search for and find your file, select the file so that the name displays in the 'Upload File' box.

Check the attestation box.

Select 'Save' which will upload the panel for use in the PaTH or Pre/Post reports.



CRISP

Case Mix Program Loader

All use of this service must comply with laws and regulations which govern uses and disclosures of personally identifiable information, including but not limited to sensitive health information such as drug and alcohol treatment information protected by federal confidentiality regulations at 42 CFR Part 2.

New Program Update Program

Program Name*

Source MRN Type:

Hospital*

Upload File*

Note: Enrollment Date must be populated in the upload file for Program to be able to be used in Pre-Post report.

By checking this box, the user attests to having a treatment relationship with all patients on the uploaded panel.

AutoSave Off Program_Template_20201208132607

File Home Insert Page Layout Formulas Data Review View

B2

	A	B	C	D
1	MRN	Source Code	Program Enrollment Date	
2				
3				
4				
5				
6				



Tableau Filters

Users can select filters in the report to focus the analysis on specific areas and populations.

Filter	Description
Service Provided From	Hospital where the visit occurred
Time Period	Visits in the respective period selected
Conditions	Applying filter will restrict dashboard to only patients with the specified chronic condition. Patients are flagged with chronic conditions if they have the appropriate diagnosis codes in Case mix data, using CMS Chronic Condition Warehouse methodology .
High Need	High Need: Patients with 3 or more IP discharges and/or OBS visits of 24+ hours during the last 12 months across all hospitals. Rising Need: Patients with 2 or more ED, IP, or OBS visits greater than 24 hours during the last 12 months across all hospitals. Excludes High Need Patients.
Visit Type	Inpatient (IP), Observation (OBS) visits greater than or equal to 24 hours, Observation visits less than 24 hours, and Emergency Department (ED) visits based on the Case Mix data as reported by hospitals
APR DRG or EAPG	The All Patient Refined Diagnostic Group and Enhanced Ambulatory Patient Group categorizes visits based on reason for admission.
Primary Payer	The primary payer as reported by hospitals in the Case Mix data.
Secondary Payer	The secondary payer as reported by hospitals in the Case Mix data
Age Group	Age grouped together as reported by hospitals in the Case Mix data
Gender, Race, Ethnicity	Race, Ethnicity, and Gender as reported by hospitals in the Case Mix data.
Expired	Patient has died.



CRISP

Report Sections

1. [Summary](#)
2. [PaTH](#)
3. [Patient Details](#)



CRISP

1. Summary

The PaTH Summary Report displays a summary chart of hospital utilization metrics. Users can drilldown to specific populations by applying filters.

A selection bar is located at the top of the PaTH Report. Here, users can select Hospital(s), ENS Panels, and/or Programs they have permissions to view. After selecting, the user must click 'Apply' to load the report accordingly.

Source MRN Type:
Hospital:
Select Program:

Summary
PaTH
Patient Detail

Patient Total Hospitalizations Dashboard

Inpatient (IP), Observation (OBV), and Emergency Department (ED) Visits

Hospital Name	IP, OBV, and ED Visits	Patients	Charges	Charges per Patient	Charges per Visit	Visits per Patient
Grand Total	383,224	271,506	\$2,623,494,516	\$9,663	\$6,846	1.41
Adventist Healthcare Fort W..	4,119	3,351	\$8,888,081	\$2,652	\$2,158	1.23
Adventist Rehab At White O..	159	147	\$5,993,591	\$40,773	\$37,696	1.08
Adventist Rehab Of Maryland	246	231	\$8,176,168	\$35,395	\$33,236	1.06
Adventist White Oak Hospital	6,707	5,605	\$54,049,513	\$9,643	\$8,059	1.20
Anne Arundel Medical Center	17,538	14,204	\$84,975,637	\$5,983	\$4,845	1.23
Atlantic General Hospital	5,332	4,327	\$14,793,893	\$3,419	\$2,775	1.23
Calvert Health Medical Cent..	5,569	4,378	\$20,899,097	\$4,774	\$3,753	1.27
Carroll Hospital Center	7,286	5,749	\$38,236,207	\$6,651	\$5,248	1.27
Christianacare, Union Hospi..	5,837	4,305	\$23,232,642	\$5,397	\$3,980	1.36
Convention Center	75	70	\$1,043,254	\$14,904	\$13,910	1.07
Doctors Community Medical..	8,201	6,692	\$40,516,162	\$6,054	\$4,940	1.23
Encompass Health Rehabilii..	311	295	\$9,250,734	\$31,358	\$29,745	1.05
Frederick Health Hospital, Inc	11,936	9,350	\$54,406,801	\$5,819	\$4,558	1.28
Garrett County Memorial Ho..	2,696	2,143	\$5,217,293	\$2,435	\$1,935	1.26
Germantown Emergency Ce..	2,513	2,168	\$2,169,261	\$1,001	\$863	1.16
Grace Medical Center	3,132	2,293	\$6,307,371	\$2,751	\$2,014	1.37
Greater Baltimore Medical C..	9,870	8,606	\$61,534,719	\$7,150	\$6,235	1.15
Holy Cross Hospital	13,445	11,518	\$84,431,232	\$7,330	\$6,280	1.17
Holy Cross Hospital-Germa..	5,140	4,329	\$19,570,933	\$4,521	\$3,808	1.19
Howard County General Ho..	10,819	9,285	\$46,320,361	\$4,989	\$4,261	1.17
Johns Hopkins Bayview Me..	9,405	7,585	\$87,015,098	\$11,472	\$9,252	1.24
Johns Hopkins Hospital	18,507	14,166	\$353,847,871	\$24,979	\$19,120	1.31
Levindale	188	177	\$10,711,948	\$60,519	\$56,978	1.06
Medstar Franklin Square	13,036	10,438	\$84,162,939	\$8,063	\$6,456	1.25
Medstar Good Samaritan	6,982	5,568	\$48,222,416	\$8,661	\$6,907	1.25
Medstar Harbor Hospital Ce..	7,501	5,910	\$32,105,483	\$5,432	\$4,280	1.27

Service Provided From

Time Period

IP, OBV, and ED Utilization

IP, OBV, and ED Charges
 to

IP, OBV, and ED Visits
 to

IP Readmissions
 to

Bedded Care (IP + OBV)>=24hrs
 to

Conditions
 Select AND/OR

Condition 1

Condition 2

Condition 3

Condition 4

Chronic Count
 to

High Need Across All MD Acute Care Hospitals

Visit Type

APR DRG or EAPG

Primary Payer

Secondary Payer

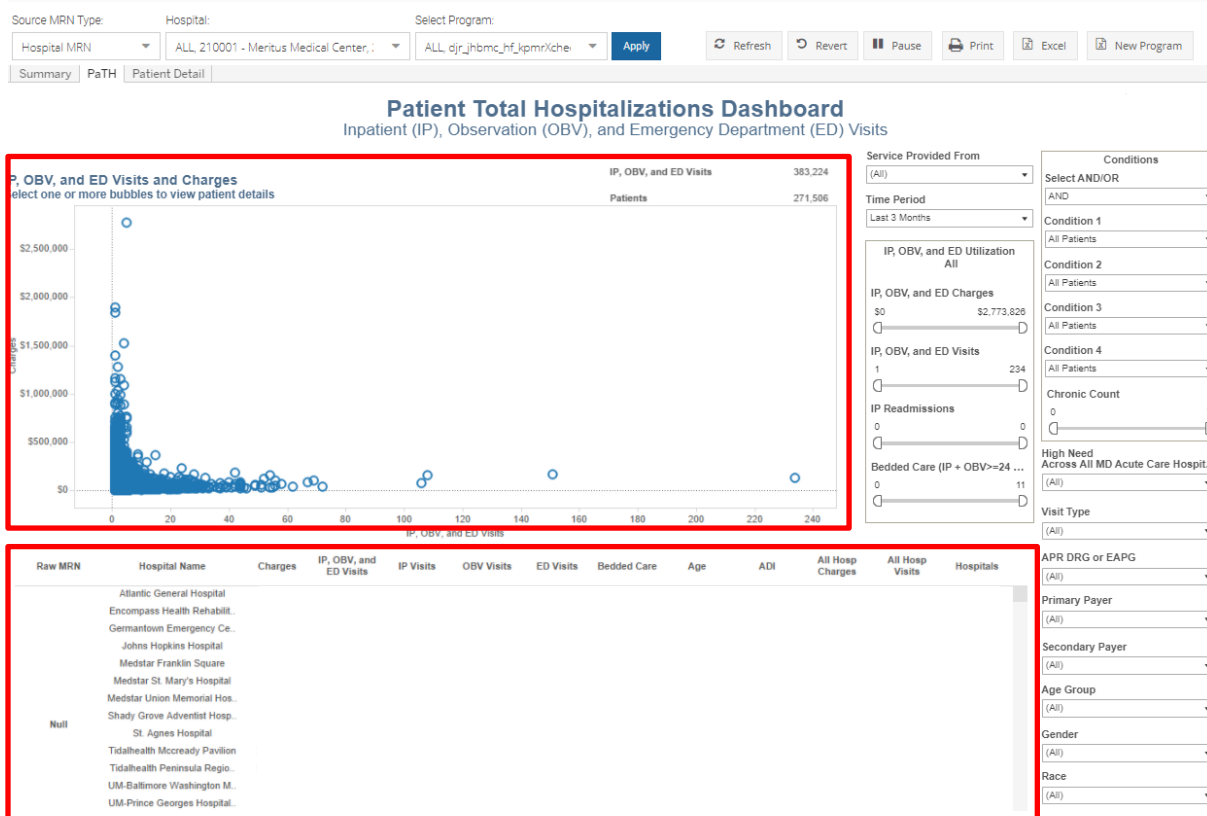


CRISP

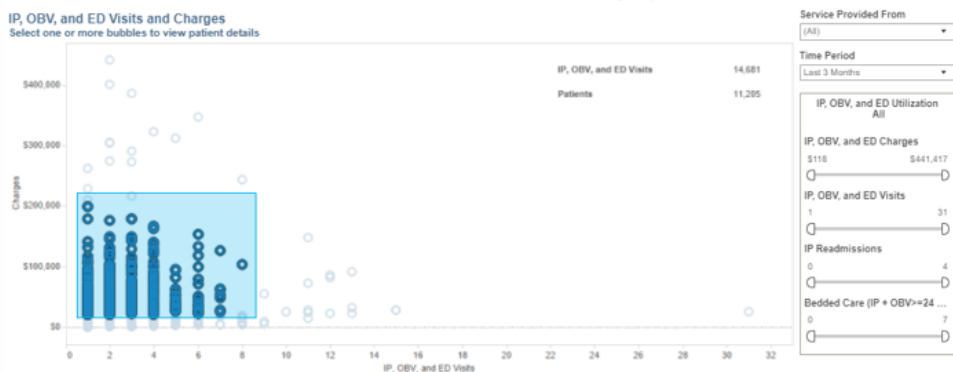
2. PaTH

The PaTH tab provides a chart of charges (y-axis) by number of inpatient, ED or OBV visits (x-axis). Each blue dot represents an individual patient.

The chart below the graph provides demographics and hospital utilization metrics for the patients that populate the graph. Here users can further understand their patient population.



Note: Users can select specific patients they want to view by clicking and dragging the mouse over the desired bubbles in the graph as shown below. The patients selected will appear in the chart below the graph.





CRISP

3. Patient Details

Users can view all the patients in their select program in the Patient Detail tab. This tab provides more information on each patient visit (every row is a visit).

Users can also export the data within Patient Detail tab. The export includes extra columns such as several additional visit-level diagnoses.

Source MRN Type: Hospital: Select Program:

Hospital MRN: ALL 210001 - Meritus Medical Center. : ALL djr_jhbmhc_hf_kpmr/xche Apply Refresh Revert Pause Print Excel **New Program**

Summary PaTH Patient Detail

Patient Total Hospitalizations Dashboard

Patient Detail Sorted by Raw MRN
Inpatient (IP), Observation (OBV), and Emergency Department (ED) Visits at All MD Acute Hospitals

Hover over More link on the right to view diagnoses descriptions

Raw MRN	Admit Date	Discharge Date	Hospital Name	Visit Type	Charge	IP Readmit	APR DRG or EAPG Description	SOI	Dx1Description	Dx1

Sort By: Raw MRN

Service Provided From: (All)

Time Period: Last 3 Months

Raw MRN: (All)

IP, OBV, and ED Utilization: All

IP, OBV, and ED Charges: 30 to \$2,773,826

IP, OBV, and ED Visits: 1 to 234

IP Readmissions: 0 to 0

Bedded Care (IP + OBV >= 24hrs): 0 to 11

Conditions: Select AND/OR AND

Condition 1: All Patients

Condition 2: All Patients

Condition 3: All Patients

Condition 4: All Patients

Chronic Count: 0 to 7

High Need Across All MD Acute Care Hos... (All)

Visit Type: (All)

APR DRG or EAPG: (All)

Primary Payer: (All)

Secondary Payer: (All)

Age Group: (All)



Table 1 – 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	CHC
ChristianaCare, Union Hospital	UHCC
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	HCH
Holy Cross Hospital Germantown	HCH_GT
Howard County General Hospital	HCGH
Johns Hopkins Bayview Medical Center	JHH_BVIEW
Johns Hopkins Hospital	JHH
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	MMC
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	MCMH
Tidalhealth Peninsula Regional Medical Center	PRMC
Baltimore Washington Medical Center	UMMS_BWMC
University of Maryland Charles Regional Medical Center	CMC



CRISP

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

CRISP Contact Information

Phone: 877-952-7477

Fax: 443-817-9587

Email: support@crisphealth.org