



CRISP

CRISP Basics

CRISP Summit 2024

7160 Columbia Gateway Drive, Suite 100
Columbia, MD 21046
877.952.7477 | info@crisphealth.org
www.crisphealth.org

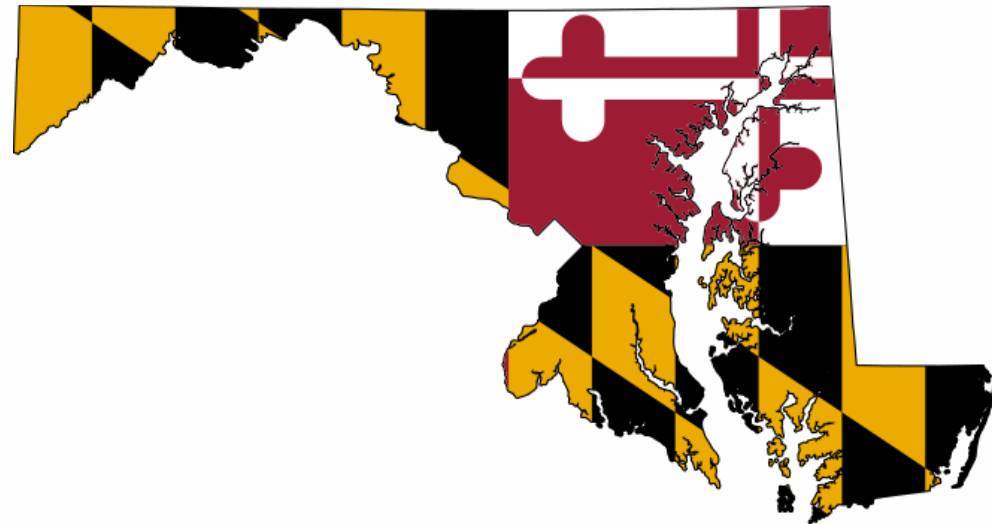


About CRISP

CRISP is the State Designated Health Information Exchange (HIE) & Health Data Utility (HDU) serving Maryland

Vision: To advance health and wellness by deploying health information technology solutions adopted through cooperation and collaboration

Partnership: CRISP is an affiliate member of CRISP Shared Services, is a non-profit support organization serving MD, CT, WV, DC, AK, VA



CRISP Implementation & Company Growth

First Steps

CRISP begins at a meeting between John Erickson and the CIOs of Maryland's three largest hospital systems, asking how to make medical records for seniors available when they visit the hospital.

Utilizing Services

Every hospital in Maryland is connected. Clinicians begin using the Query Portal, and the team develops the Encounter Notification Service.

Supporting Partnerships

The initial research use case goes live. Program Administration to support care redesign programs begins and patient-level Medicare claims become available. The InContext app goes live in Epic. CRISP partners with the West Virginia Health Information Exchange (WVHIN) to share infrastructure.

Health Data Utility

Real-time hospital utilization reports are launched, COVID testing reports and notifications are introduced, immunization tools go live, and new data types are shared through the HIE. The Insights data lake and analytics are leveraged extensively.

2006

2008

2010

2012

2014

2016

2018

2020

2022

2024

Getting Connected

CRISP is named Maryland's designated statewide HIE through a competitive process and the first provider organizations connect. The HSCRC awards a grant and CRISP wins federal Regional Extension Center funding.

Expansion

Claims-based reports are produced, the Prescription Drug Monitoring Program and Health Benefits Exchange provider directory go live, the first Washington D.C. hospital connects, and health plans begin accessing records through a specialized portal, and CRISP begins routing CCDAs at hospital discharge.

Essential Infrastructure

DC Medicaid claims data is made available. New open source HIE stack is implemented (June) first county EMS are connected (Oct) CRISP begins responding to national network queries. Connecticut's HIE, Connie, partners with CRISP.

Operational Excellence

CRISP enhances EHRs by integrating more data, boosting efficiency, and fortifying security. We actively engage with National Networks and collaborate with other HIEs to expand data access and interoperability.

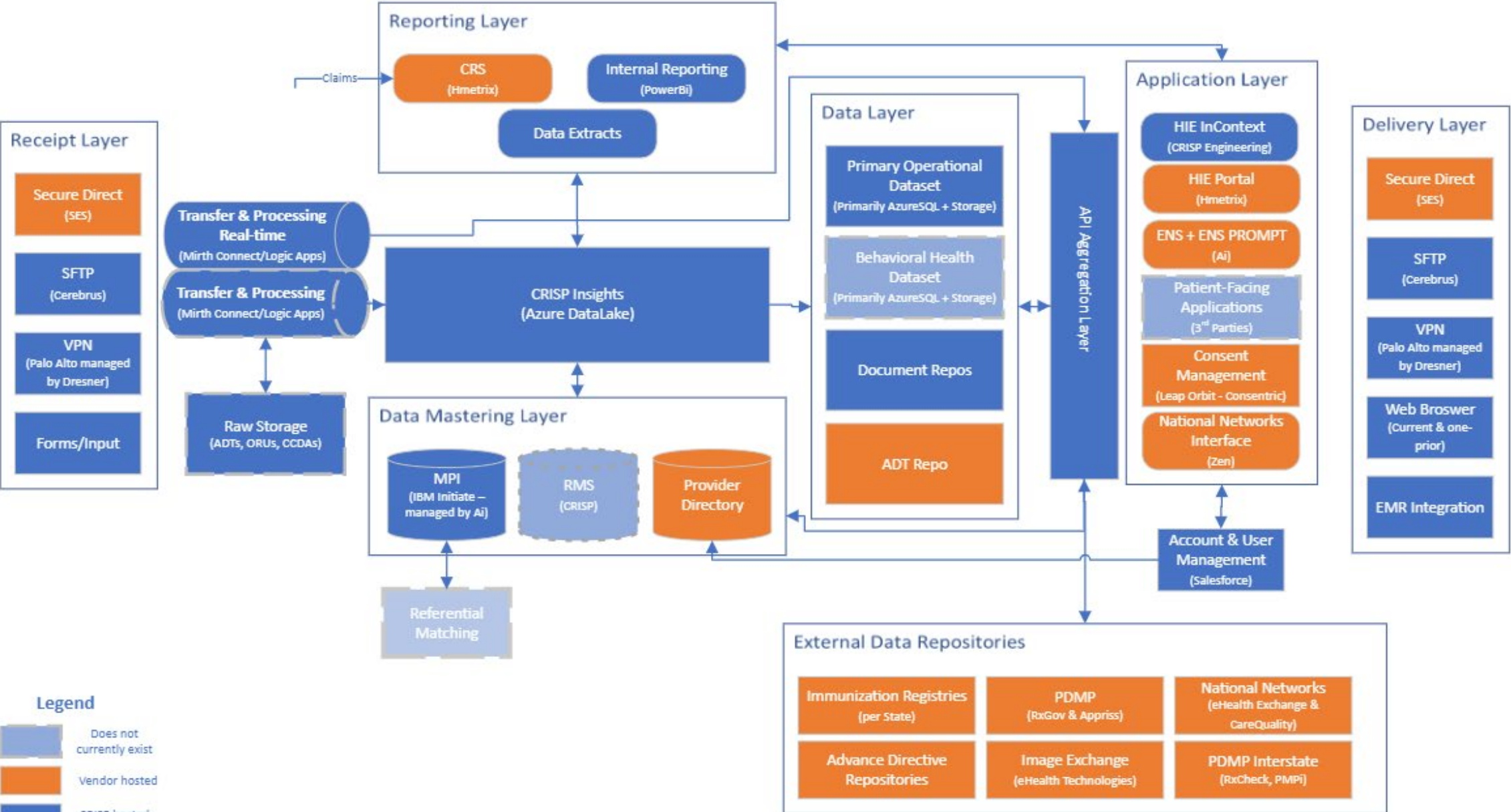


What is an HIE and HDU? And why is it Important?



- A Health Information Exchange (HIE) is an entity that provides or governs organizational and technical processes for the maintenance, transmittal, access, or disclosure of electronic health care information between or among health care providers or entities through an interoperable system.
- HDUs allow for the collection, aggregation, and analysis of clinical information, public health data, and health administrative and operations data to assist the State in the evaluation of public health interventions and health equity
- Both are important to promote interoperability

CRISP Architecture





Privacy & Security

- Opt-out model gives patients the right to block electronic access to their information shared through the HIE
 - All participating providers must update Notice of Privacy Practices and make patient education materials available
 - If a patient opts out, no information will be available through the portal and notifications about hospitalizations for this patient will be blocked
 - EXCEPTION: By Maryland law, opt-outs do not apply to PDMP and this data will still be visible in a patient's record
- Annual audits and reports as required by State Designation Agreement, regulations, and best practices
 - SOC 2 Type 2
 - HIPAA & COMAR Compliance
 - Cybersecurity & Social Engineering Testing
- Adhering to industry best security standards
 - EHNAC HIE accredited since Feb. 2017
 - HITRUST certificated since Nov. 2017
- Continuous privacy monitoring
 - Protenus software monitors query activity to identify potentially suspicious activity outside of a permitted use case





CRISP Services

1. POINT OF CARE: Clinical Query Portal & InContext Information

- Search for your patients' prior health records (e.g. labs, radiology reports, etc.)
- Determine other members of your patient's care team
- View external records in a SMART on FHIR app inside your EHR

2. CARE COORDINATION: Encounter Notifications

- Be notified when your patient is hospitalized in any regional hospital
- Enhance workflows across multiple care settings and teams

3. POPULATION HEALTH REPORTS: CRISP Reporting Services (CRS)

- Using claims, public health, and clinical data to design dashboards and measure interventions

4. PROGRAM ADMINISTRATION:

- Making policy discussions more transparent and informed
- Disseminating evidence-based best practices and technology

5. PUBLIC HEALTH & HEALTH DATA UTILITY:

- Deploying services in partnership with health officials
- Providing information and services to state and local health departments
- Supporting COVID-19 response efforts

Service	Typical Week
Data Delivered into EMRs	1,500,000
Patients Manually Searched	205,000
ENS Messages Sent	3.5 mil
Clinical Documents Processed	675,000
Portal Users	107,000
Live ENS Practices	1,580
Reports Accessed	2,750
Report Users	2,000



Launching CRISP InContext from an EHR

HIE InContext Gilbert Grape
Male | Jan 1, 1984

PATIENT INFORMATION | MEDICATION MANAGEMENT | CLINICAL DATA | CARE COORDINATION | SOCIAL NEEDS DATA | DATA FROM CLAIMS

HEALTH RECORDS | ENCOUNTERS | STRUCTURED DOCUMENTS | IMMUNIZATIONS

LABORATORY | RADIOLOGY | CLINICAL NOTES

Health Records

Date Collected ↓	Source	Category	Description	Provider
2022-06-21	CRISP ULP PROD	Laboratory	MAGNESIUM	123 Test Prov
2022-05-18	Danbury Hospital	Laboratory	eGFR	1689651903 Jose Mendez
2022-05-18	Danbury Hospital	Laboratory	Auto Diff	1689651903 Jose Mendez
2022-05-18	Danbury Hospital	Laboratory	Calcium	1689651903 Jose Mendez





CRISP InContext Data Sources

- Admit, discharge, or transfer (ADTs) information, which can include patient demographic, diagnostic, and medication history - HL7 messages sent to CRISP when a patient is admitted to a care setting, transferred to another care setting, or discharged from a care setting.
- Insurance information and Claims data - A medical claim is a bill that healthcare providers submit to a patient's insurance provider. CRISP has access to MD Medicare, MD Medicaid, and Hospital All Payer
- Local and Interstate PDMP
- Patient-specific clinical summary documents, called Continuity of Care Documents (CCDs), which is an electronically generated, patient-specific clinical summary document used to improve communication between healthcare providers during a transition of care
- Continuity of Care Documents through National Networks
- Radiology images and reports
- Laboratory results
- List of an organization's patients
- Other clinical data including discharge summaries, care notes, advance directive, and care alerts.



InContext High Level Feature Offerings

Patient Information

Priority Alerts

Medication Management

- PDMP
- PDMP Advisories
- Reported Medications

Clinical Data

- Health Records
- Encounters
- Problems
- Structured Documents (CCDAs)
- Immunizations

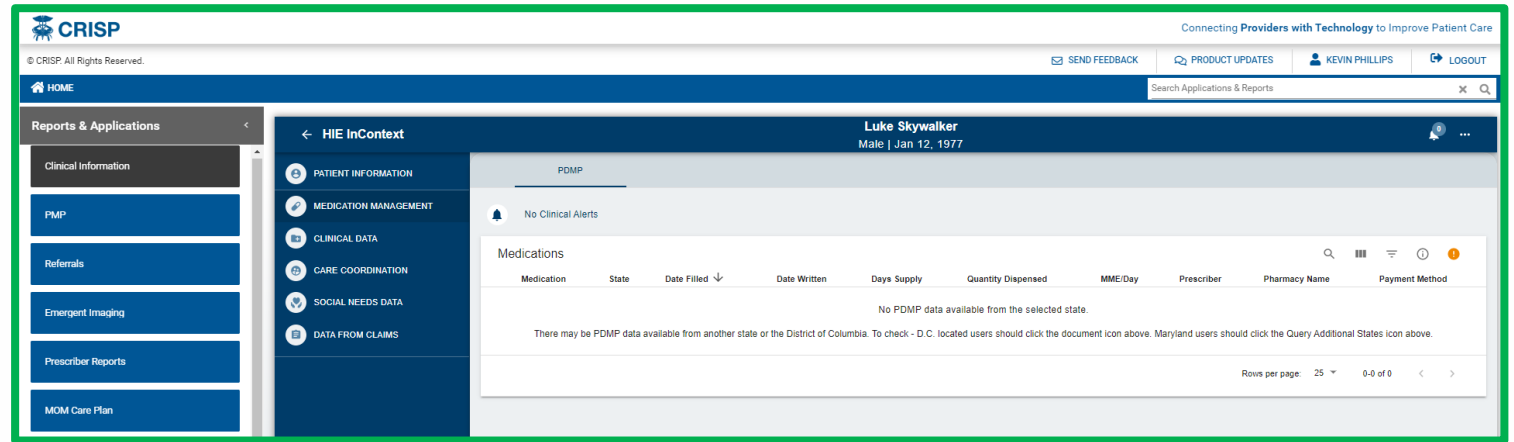
Care Coordination

- Care Team
- Care Alerts
- Referral History
- Advance Directives

Social Determinants

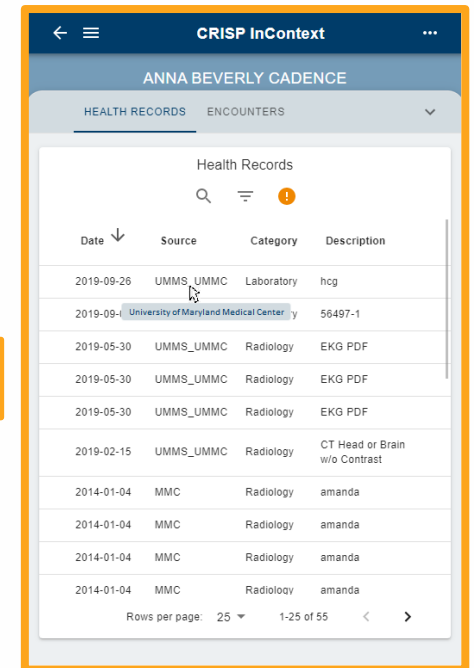
- Assessment
- Conditions

Claims Data



The screenshot shows the CRISP InContext interface in a wide view. The top navigation bar includes the CRISP logo, user information (KEVIN PHILLIPS), and a search bar. The main content area is titled "HIE InContext" and displays patient information for "Luke Skywalker" (Male, Jan 12, 1977). The interface is divided into several sections: "Reports & Applications" on the left, "Patient Information" and "Medication Management" in the middle, and a "PDMP" (Prescription Drug Monitoring Program) section on the right. The PDMP section shows a table of medications with columns for Medication, State, Date Filled, Date Written, Days Supply, Quantity Dispensed, MME/Day, Prescriber, Pharmacy Name, and Payment Method. A message indicates that no PDMP data is available from the selected state.

Wide View



The screenshot shows the CRISP InContext interface in a compact view. The top navigation bar includes the CRISP logo and user information. The main content area is titled "CRISP InContext" and displays patient information for "ANNA BEVERLY CADENCE". The interface is divided into several sections: "Health Records" and "Encounters" in the middle, and a table of health records on the right. The table has columns for Date, Source, Category, and Description. A message indicates that no PDMP data is available from the selected state.

Compact View



When is CRISP InContext Updated

- Updates, new features, and enhancements are released about every month to 6 weeks. Data within the application will refresh at near real time to monthly depending on the source.
- Release notes are shared with users a few weeks prior to the next version release & stored on the CRISP Website
- <https://www.crisphealth.org/incontext/>

InContext Release Notes

[View all Documents →](#)

The screenshot displays two document cards under the heading 'InContext Release Notes'. Each card features a document icon in a blue circle. The first card is titled 'HIE InContext Current Version v2.43.0 Release Notes →' and is dated 'December 18, 2023'. The second card is titled 'CRISP InContext Release Notes All Time →' and is dated 'December 1, 2023'. A link 'View all Documents →' is visible in the top right corner of the page.

Document Title	Date
HIE InContext Current Version v2.43.0 Release Notes →	December 18, 2023
CRISP InContext Release Notes All Time →	December 1, 2023



What if my EHR isn't connected with InContext?

- No Problem – you can find the same InContext App within a secure web-based site called CRISP Portal.
- InContext within the CRISP Portal is called the **Clinical Information Service**


The screenshot displays the CRISP Portal interface. At the top left is the CRISP logo and the tagline "Connecting Providers with Technology to Improve Patient Care". Below this is a navigation bar with "HOME" and a search bar labeled "Search Applications & Reports". The main content area features a search form with fields for "First Name", "Last Name", "Date of Birth", "Gender", and "SSN". Below the form are "Reset" and "Search" buttons. To the right of the form is a table with columns for "First Name", "Last Name", "Date of Birth", "Gender", "Address", and "Match Score". The table currently displays "No records found". Below the search form is a "Your Dashboard" section with the instruction "For applications requiring patient context, please start by using the Patient Search interface above." The dashboard contains six tiles: "Emergent Imaging", "Secure Upload", "Prescriber Reports", "SBIRT", "2020 eCQMs", and "COVID-19 LTC Partnership".

<https://portal.crisphealth.org>



CRISP Portal URL


- <https://portal.crisphealth.org>
- User need to sign in with Email, Password, and Two Factor Authentication

Email 

Next

[Reset your password?](#)

© hMetrix

Two-Factor Authentication 

Open Authy mobile app and approve the login request

Trust this device

Trouble getting Auth request? Use TOTP token instead

I

[Forgot your phone? Request help!](#) [Request phone number reset](#)

Visit our website for guides & video on how to set up 2FA (<https://www.crisphealth.org/crisp-portal/>)



Two Factor Authentication

To improve security, the CRISP Portal requires that all users set up two-factor authentication for their portal account. Users have three options to meet the two-factor authentication requirement of the CRISP Portal.

- 1. Twilio Authy Application
- 2. Other Authentication Applications – such as Google Authenticator, Microsoft Authenticator, Duo
 - Authenticator, Duo
- 3. Security Key such as a YubiKey

Register For Two-Factor Authentication

Select 2FA method: Authy Push or Token

United States of America (+1)

Your Cellphone

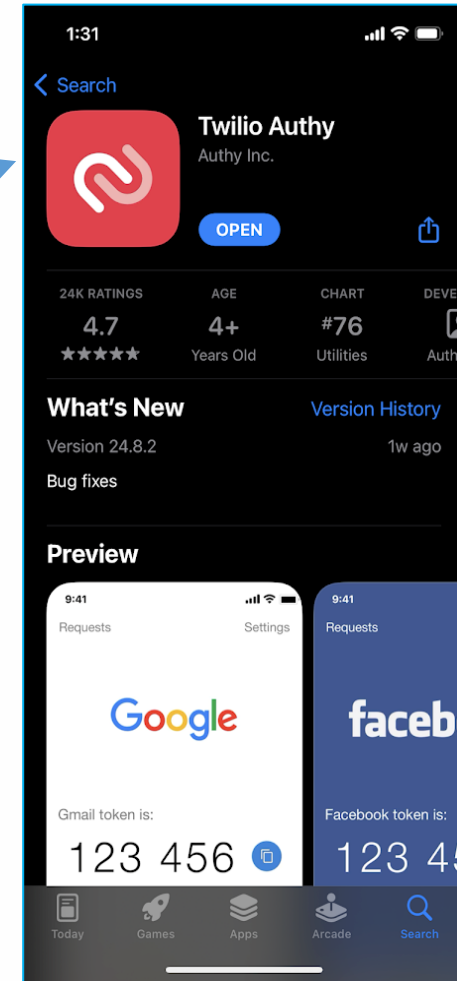
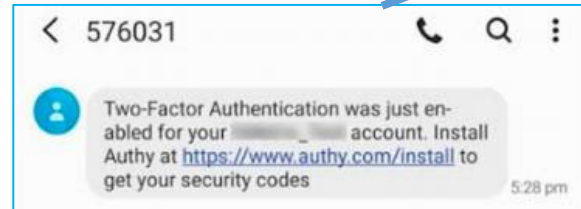
[2FA User Guide](#)



Portal Two-factor Authentication (2FA)

After entering your phone number, you will receive a text message with a link to download the authy app.

If you prefer to use another authentication app, scan the QR Code using that app.

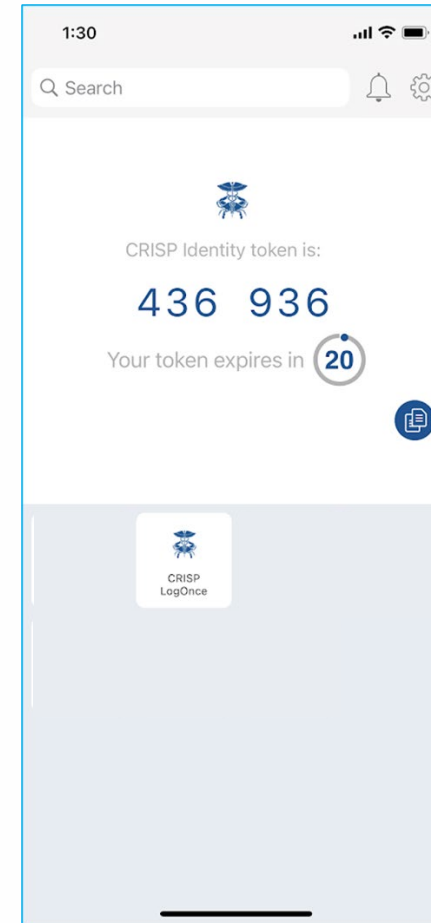




Portal Two-factor Authentication (2FA)

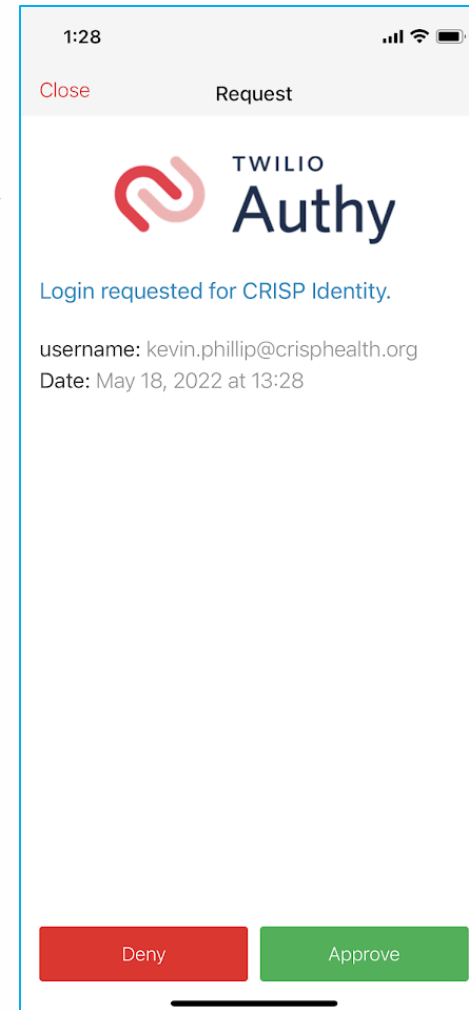
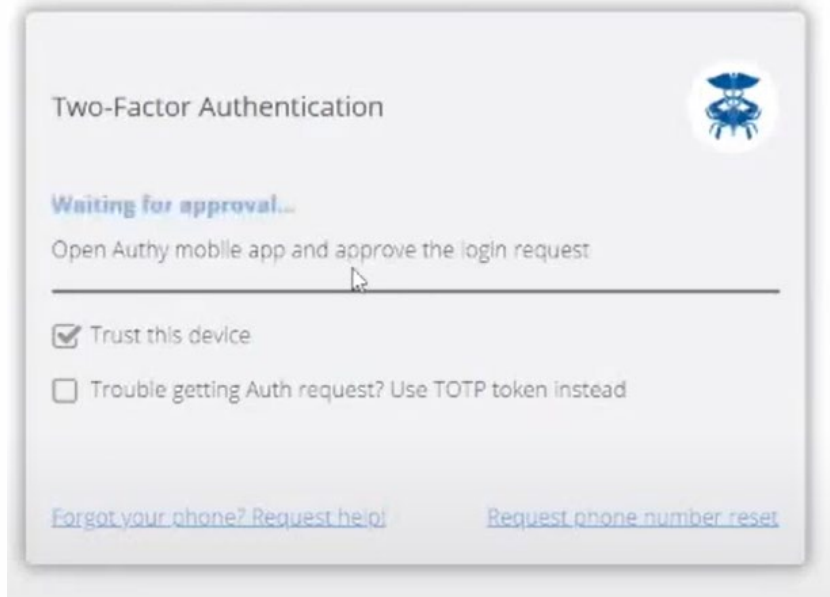


Enter the 6- digit code within the Authy App to activate. A similar process of entering a six-digit code will occur for those using an alternative application.





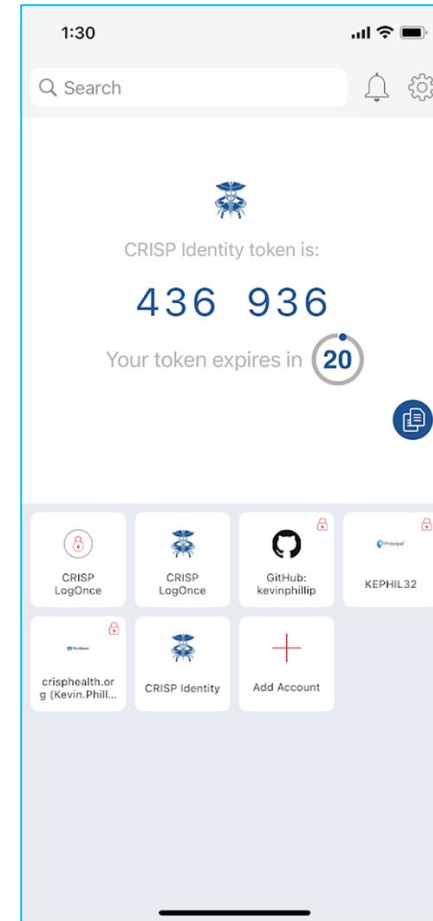
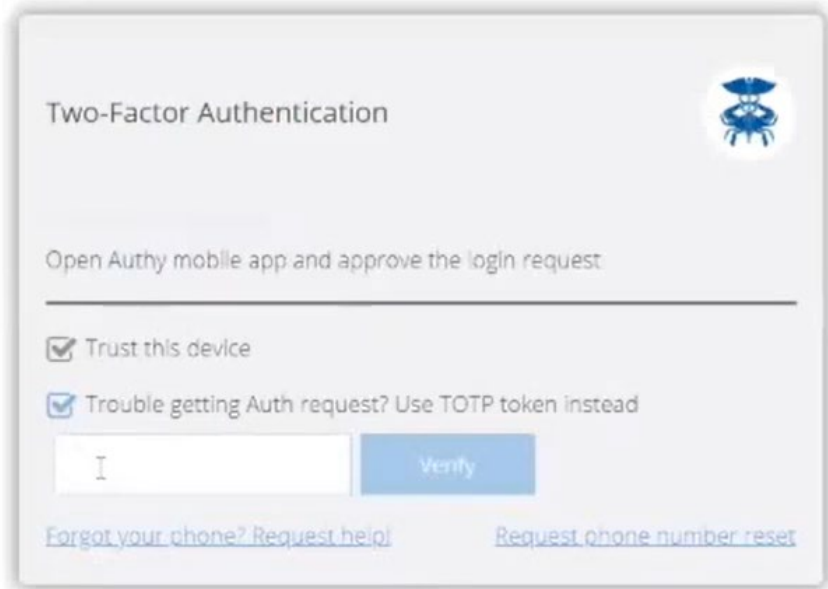
Portal Login 2FA



Users using Authy will receive a push notification to accept on their linked cell phones



Portal Login 2FA



If you are not receiving the push notification, click the click box next to “Trouble getting Auth Request? And enter the 6-digit code within your authy app to enter the portal.

Users not using Authy will always have to enter a 6-digit code to enter the portal



CRISP Portal Landing Page

The screenshot shows the CRISP Portal Landing Page. At the top left is the CRISP logo and the text "© CRISP. All Rights Reserved.". To the right of the logo is the tagline "Connecting Providers with Technology to Improve Patient Care". Below the tagline are three callouts: 1. A red circle with the number "1" points to a "SEND FEEDBACK" button. 2. A red circle with the number "2" points to a "PRODUCT UPDATES" button. 3. A red circle with the number "3" points to a "Your Dashboard" section. The "Your Dashboard" section contains a message: "For applications requiring patient context, please start by using the Patient Search interface above." Below this message are four blue buttons: "Emergent Imaging", "Secure Upload", "Prescriber Reports", and "SBIRT".

1. Send Feedback – Opens a feedback forum in another tab to send feedback or questions to CRISP Support.
2. Product Update – Opens a pop out window which will display news and notes about CRISP services
3. Note about launching services – some services like Clinical Information require the user to first use the patient search bar



CRISP Portal Services

The screenshot displays the CRISP portal interface. At the top left is the CRISP logo and the tagline "Connecting Providers with Technology to Improve Patient Care". Below this is a navigation bar with "HOME" and a search bar labeled "Search Applications & Reports". A secondary bar contains "SEND FEEDBACK", "PRODUCT UPDATES", "JEFFREY BAHEN", and "LOGOUT".

The main content area is divided into two sections. The upper section is a patient search form with fields for "First Name", "Last Name", "Date of Birth", "Gender", "Address", and "SSN". Below these fields are "Reset" and "Search" buttons. The search results area shows "No records found".

The lower section is titled "Your Dashboard" and contains a grid of service tiles: "Emergent Imaging", "Secure Upload", "Prescriber Reports", "SBIRT", "2020 eCQMs", and "COVID-19 LTC Partnership". The "Prescriber Reports" tile is highlighted with a red border, and a red arrow points from a text box to it.

Each service you have access to will appear as a box in 'Your Dashboard'. All services you had access to in ULP will be available in the Portal.



Launching CRISP Services from the CRISP Portal

Q Patient Search

First Name *
Gilbert

Last Name *
Grape

Date of Birth *
01/01/1984

Gender

SSN

Reset **Search**

Search Results

First Name	Last Name	Date of Birth	Gender	Address	Match Score
Gilbert	Grape	01/01/1984	Male	4145 Earl C Adkins Dr., River, WV, 26000	117 - probable

Launching CRISP InContext from the CRISP Portal requires a patient search

Minimum Search Requirements are:

1. First Name
2. Last Name
3. Date of Birth

Gender and Social Security Number (SSN) can be added to narrow down search results



Launching CRISP InContext from the CRISP Portal

Click the record of the patient of interest to select an application to launch with this patient's data.

By using this system, all users acknowledge notice of, and agree to comply with, CRISP's Participation Agreement (PA) and CRISP's Policies and Procedures. [Click here to review the policies and procedure.](#) CRISP uses a privacy monitoring tool to ensure all users are adherent to an approved policy of use case. By continuing to use this system, you agree to these terms and conditions of use.

Search Results

First Name	Last Name	Date of Birth	Gender	Address	Match Score
Gilbert	Grape	01/01/1984	Male	4145 Earl C Adkins Dr., River, WV, 26000	

Select App

AK Labs and Imaging

CareTeam

Clinical Information

Consent Tool

COVID Lab Tools

MOM Care Plan

PMP

Post Acute Capacity

Referrals

Snapshot

ent context, please start by using the Patient Search interface above.

Referrals	Emergent Imaging	Prescriber Reports	MOM Care Plan	Post Acute Capacity	SBIRT	2020 eQMs
HIE Admin Tool	Snapshot	Consent Tool	Referral Portal	Referral Portal CBO	Referral Portal MCO	EDAS - Emergency Department Advisory System



HIE Admin Tool Overview

- The Health Information Exchange (HIE) Admin Tool allows HIE Administrators to manage their colleagues' CRISP Portal accounts. User account creation, user verification, access to specific CRISP Services, and employee turnover can all be handled via the tool. Users can do the following in the tool:



- Create Users
- Reactivate Suspended Users
- Recreate Deactivated Users



- View Account Services
- Provision Services to Users



- Audit Users
- Deactivate User Accounts for users who leave your organization or no longer require access

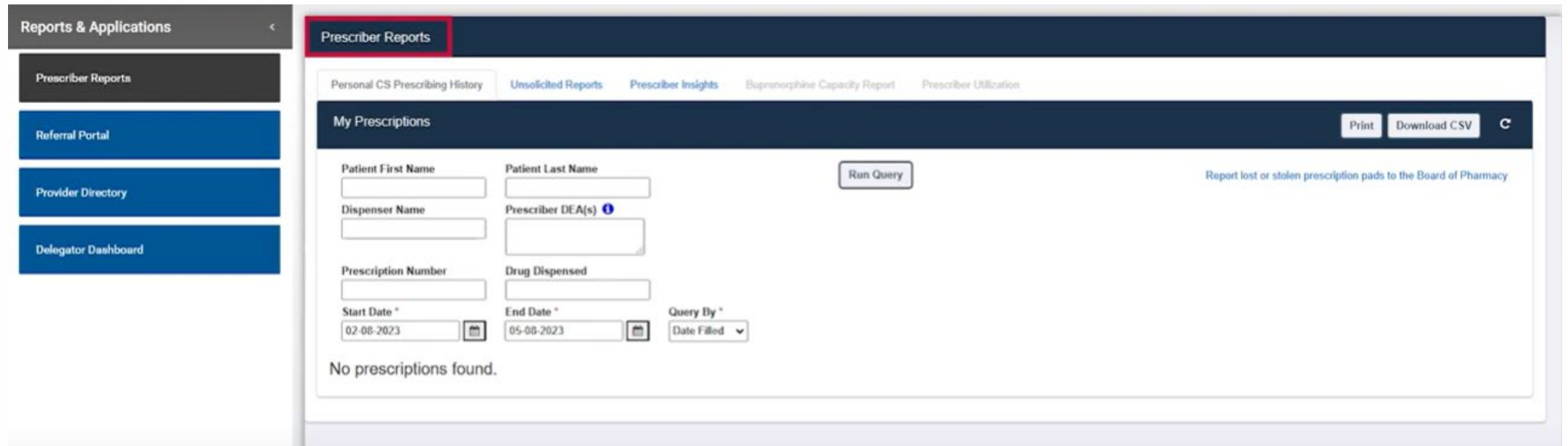


HIE Admins are responsible for adding new users to their account(s), assigning HIE services to their user(s), and auditing each user every 90 days.



Point of Care: Prescription Drug Monitoring Program (PDMP)

Your Dashboard  For applications requiring patient context, please start by using the Patient Search interface above.





Point of Care: Prescription Drug Monitoring Program (PDMP)

← HIE InContext Anna Cadence
Female | Nov 16, 1981

PATIENT INFORMATION
MEDICATION MANAGEMENT
CLINICAL DATA
CARE COORDINATION
SOCIAL NEEDS DATA
DATA FROM CLAIMS

ADVISORIES PDMP

No Clinical Alerts

Medications

Medication	State	Date Filled ↓	Date Written	Days Supply	Quantity Dispensed	MME/Day	Prescriber	Pharmacy Name	Payment Method
oxyCODONE HCl 5 MG TABS	MD	2022-07-15	2022-07-15	30	60	15	HOSE PHARMACIES, INC.	WAL-MART PHARMACY 10-2279	—
Zubsolv 8.6-2.1 MG SUBL	MD	2022-07-11	2022-07-11	15	45	—	DUNDALK PHARMACY	WAL-MART PHARMACY 10-2279	—
Nucynta ER 150 MG TB12	MD	2022-07-01	2022-07-01	30	90	180	WALGREEN CO.	WAL-MART PHARMACY 10-2279	—
oxyCODONE HCl 5 MG TABS	MD	2022-06-15	2022-06-15	30	60	15	MARYLAND CVS PHARMACY, L.L.C.	WAL-MART PHARMACY 10-2279	—
ALPRAZolam 0.5 MG TABS	MD	2022-04-06	2022-04-06	30	60	—	MARYLAND CVS PHARMACY, L.L.C.	WAL-MART PHARMACY 10-2279	—
oxyCODONE HCl 5 MG TABS	MD	2022-02-26	2022-02-25	30	60	15	MARYLAND CVS PHARMACY, L.L.C.	WAL-MART PHARMACY 10-2279	—
Zubsolv 8.6-2.1 MG SUBL	MD	2022-02-17	2022-02-17	15	45	—	—	WAL-MART PHARMACY 10-2279	—
ALPRAZolam 0.5 MG TABS	MD	2022-02-07	2022-02-05	30	60	—	DUNDALK PHARMACY	WAL-MART PHARMACY 10-2279	—
oxyCODONE HCl 5 MG TABS	MD	2022-02-03	2022-02-03	30	60	15	—	WAL-MART PHARMACY 10-2279	—
Zubsolv 8.6-2.1 MG SUBL	MD	2022-02-01	2022-02-01	15	45	—	WAL-MART PHARMACY 10-2279	DUNDALK PHARMACY	—
HYDRomorphine HCl 4 MG TABS	MD	2022-01-28	2022-01-28	20	120	96	WALGREEN CO.	DUNDALK PHARMACY	—
Zubsolv 8.6-2.1 MG SUBL	MD	2022-01-14	2022-01-14	15	45	—	WAL-MART PHARMACY 10-2279	DUNDALK PHARMACY	—

Powered by CRISP



Image Exchange

- Image Exchange is our image-sharing service that allows users to view patient images in full diagnostic quality through the Web Portal or the InContext app within their EMR.
- In order for an organization to become an Image Exchange participant, meaning that they contribute images to the HIE, they must also share radiology reports.
- We work very closely with our imaging partner, eHealth Technologies (eHT), to make images accessible for end users.
- Images are available to all users that have access to their patient's health records.



Care Coordination: Encounter Notifications

- CRISP offers a service which enables medical personnel to receive real-time alerts when a patient has a hospital encounter.
- Customizable by organization, the CRISP ENS will send a secure message to providers for active patients in the practice.
- Practices may choose which alerts are most relevant to them, such as: hospital admission, hospital discharge, or emergency room visit.
- ENS relies on Providers send up to date patient panel information



CRISP Panels - FAQ

What is a panel?

A panel is an excel spreadsheet pulled from an offices EMR that includes patients from the past 18 months. This is what CRISP considers an “active” patient.

What is the purpose of a panel?

A panel serves multiple purposes. First, it establishes a patient relationship between CRISP and your organization. This gives CRISP an idea of what patients you are going to query. You can always search patients outside of your panel with a legitimate reason (ie care coordination, new patients etc) but you will get an “attestation” warning that the patient is not on your panel.

A panel is also how ENS notifications are established. We pull notifications for patients on your panel.

What fields are required for a panel?

All panels must include Patient ID, First Name, Last Name, Address, City, State, Zip, DOB and Gender. The panel will not load without these fields.



CRISP Panels - FAQ

Does a panel expire?

Yes, all panels do expire. Typically they expire after 2 years but for some programs (ie MDPCP) they expire after 90 days. Please check with your Outreach Representative to establish your panel expiration date.

What happens when a panel expires?

When a panel expires you will lose access to clinical records. You will still have access to PDMP.

How often should I upload a panel?

Ultimately, this decision is up to you. We recommend to upload a new panel quarterly or every 90 days. But if you are a new practice and getting new patients frequently you can upload it sooner. Or, if you want you can upload it every 2 years.

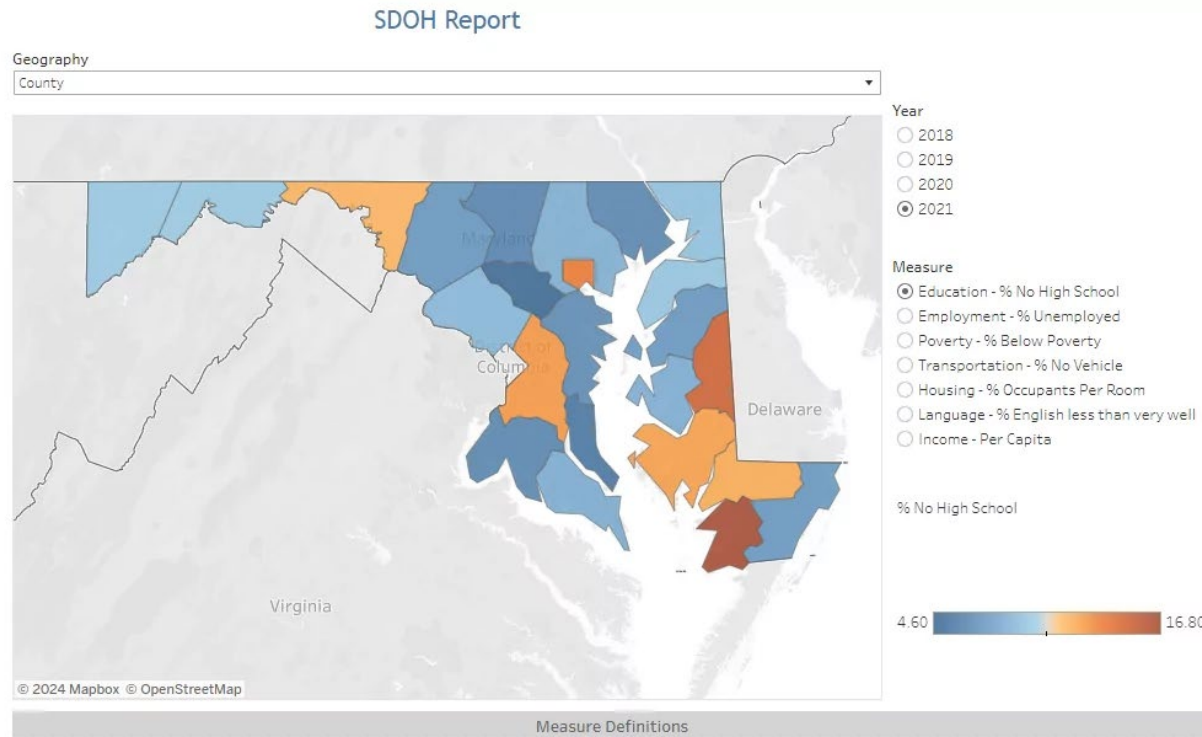
How can I upload a panel to CRISP?

You can upload a Patient Panel to CRISP through the Panel Processor application.

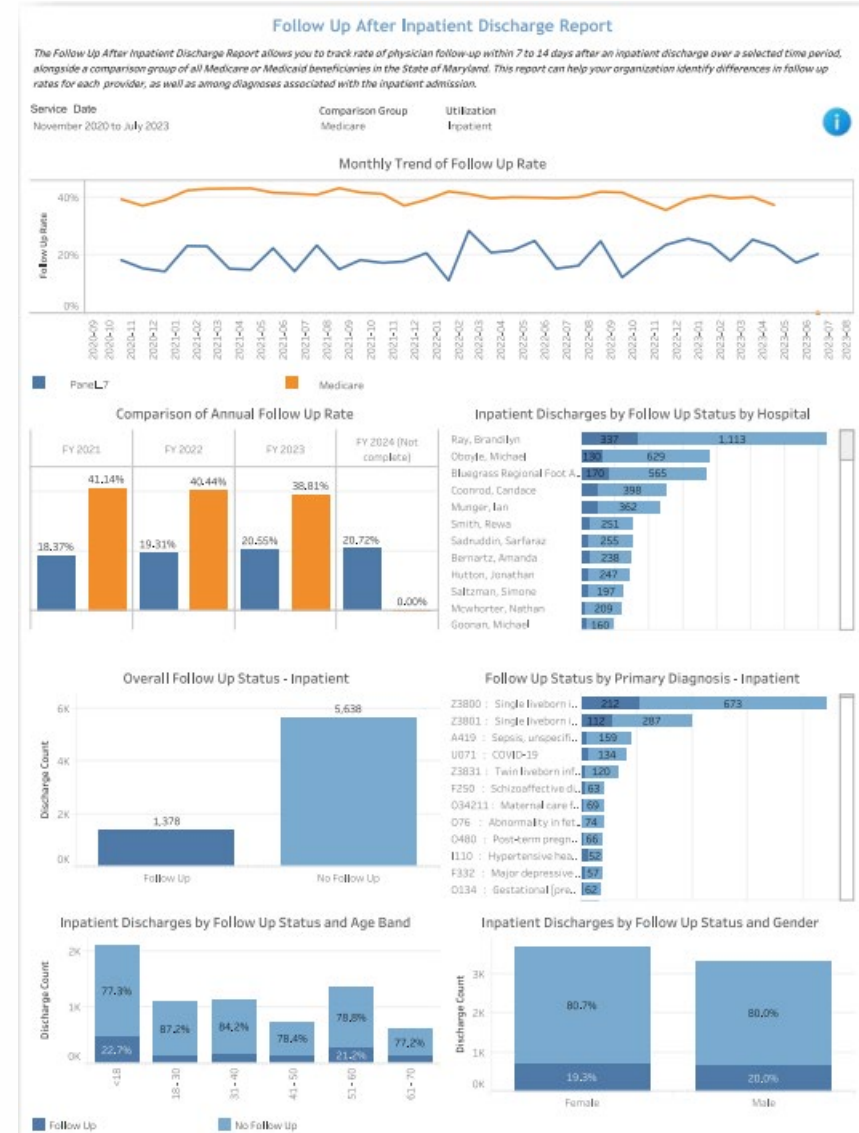
The screenshot shows the 'Panel Processor' application interface. At the top, there is a dark blue header with the text 'Panel Processor'. Below the header, there are two tabs: 'Upload File' (which is active) and 'Upload History'. A progress bar with three steps is visible: 1. Select Template, 2. Upload File, and 3. Processing File. The 'Select Template' step is currently active, showing a dropdown menu labeled 'Select Template File'. Below the dropdown menu, there is a 'Next' button.



Population Health: CRISP Reporting Services



- Education** - Percentage of population 25 years and over with less than a high school diploma
- Employment** - The percentage estimate of the civilian labor force that is unemployed in a specific geographic area.
- Poverty** - Percentage of families and people whose income in the past 12 months is below the poverty level
- Transportation** - Percentage estimate of households without a vehicle available in a specific geographic area.
- Housing** - Percentage estimate of occupied housing units with more than one person per room (i.e., crowded housing) in a specific geographic area.
- Language** - Percentage estimate of the population 5 years and over who speak a language other than English at home in a specific geographic area.
- Income** - An estimated value of the per capita income in a given area, which has been adjusted for inflation to reflect 2018 dollars.





CRISP Website & Learning System

[Services](#)[For Patients](#)[Resources](#)[About CRISP](#)[Login](#) | [Register](#)

CRISP is the State Designated Health Information Exchange (HIE) and Health Data Utility (HDU) for Maryland.

We are a non-profit organization that facilitates the electronic transfer of clinical information between disparate health information systems.

[For Providers](#)[For Patients](#)



Contact and Resources

Training materials, recorded webinars, and patient education flyers can be found at: <https://crisphealth.org/>

CRISP Support

- support@crisphealth.org
- 877-952-7477