



CRISP

HERC/Pathways

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About CRISP

Regional Health Information Exchange (HIE) serving Maryland, and West Virginia and the District of Columbia.

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



	Maryland
Live hospitals	All acute care hospitals
Provider Orgs using ENS or Query Portal	1,350+
Unique patients in our index	+17.9 million
Patient searches	+363,000/month (337k found)
Encounter alerts sent	+2.5MM/month (4MM 6/2019)
PDMP Queries	2.5MM/month



CRISP Data 101

- Many data sources (100s)
- Mapped to single patient record using our Master Patient Index
- For data to be effectively used for reporting:
 1. CRISP Participant must choose to share data with CRISP
 2. CRISP and Participant policies allow for specific data use
 3. Data must be discrete (for reporting)
 4. Data must be coded
 5. Data must be stored
- Can combine with publicly available, deidentified data (BRFSS)



CRISP Sources

Type of source	Data in source	Notes
All Payer Hospital Claims data	Encounters, diagnoses, cost	High data coverage and quality (hospital only)
Medicaid/Medicare Claims data	Encounters, diagnoses, pharmacy	High data coverage and quality, special approval required
Direct Source Data- Admit/discharge info, clinical documents, labs	Encounters, diagnoses, notes, labs	Variable data coverage and quality
Patient Panels	CRISP Participants send in participating patients	Not all providers included



CRISP's role in HERCs

- Support reporting and analytics for the CHRC
- Provide access to hospital claims-based data dashboards to applicants for planning purposes
- Provide data dashboards to grantees for outcome and program monitoring
- Deliver data to CHRC and evaluators



CRISP Reporting Services

The screenshot displays the CRISP Reporting Services dashboard. At the top left is the CRISP logo and the text "CRISP REPORTING SERVICES". On the top right, there is a navigation bar with the tagline "Connecting **Providers with Technology** to Improve Patient Care", a "Download HSCRC Regulatory Reports" link, a "Help" button, a "Report Updates" button with a red notification badge, a user profile for "Mandel, Laura", and a "Logout" button. Below this is a search bar labeled "Search Reports...".

The main content area is divided into two sections:

- Your Dashboard**: A grid of six blue tiles with icons and text:
 - All-Payer Population (icon: document with dollar sign)
 - HSCRC Regulatory Reports (icon: document with calculator)
 - Public Health (icon: document with circular arrow)
 - Introduction (icon: document)
 - Internal Reports (icon: document with bar chart)
 - Favorites (icon: heart)
- Favorites**: A list of four items, each with a red heart icon, a title, a link, and a bar chart icon with a question mark:
 - Care Coordination Program Enrollment
[All-Payer Population >> Care Coordination](#)
 - Hospital Panel Enrollment Dashboard
[All-Payer Population >> Panels](#)
 - Pre/Post Analysis
[All-Payer Population >> Panels](#)
 - Public Health Dashboards
[Public Health >> Public Health Dashboard](#)



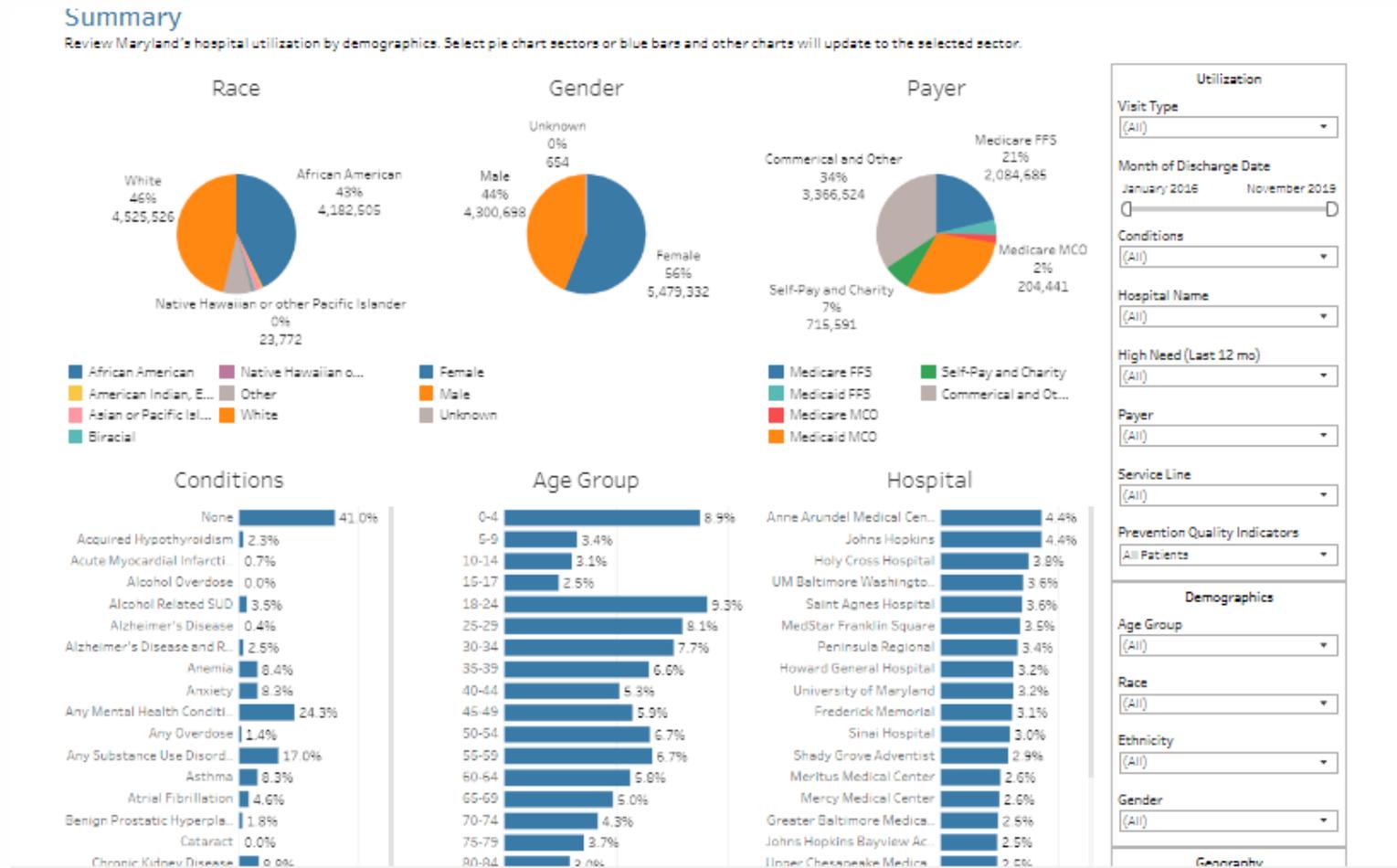
Public Health Dashboard

Data Source:

CaseMix – hospital claims based data

Examples of Key Questions:

- What is age distribution of diabetes hospitalizations in the county?
- What is the racial makeup of teenagers experiencing asthma at St Agnes?



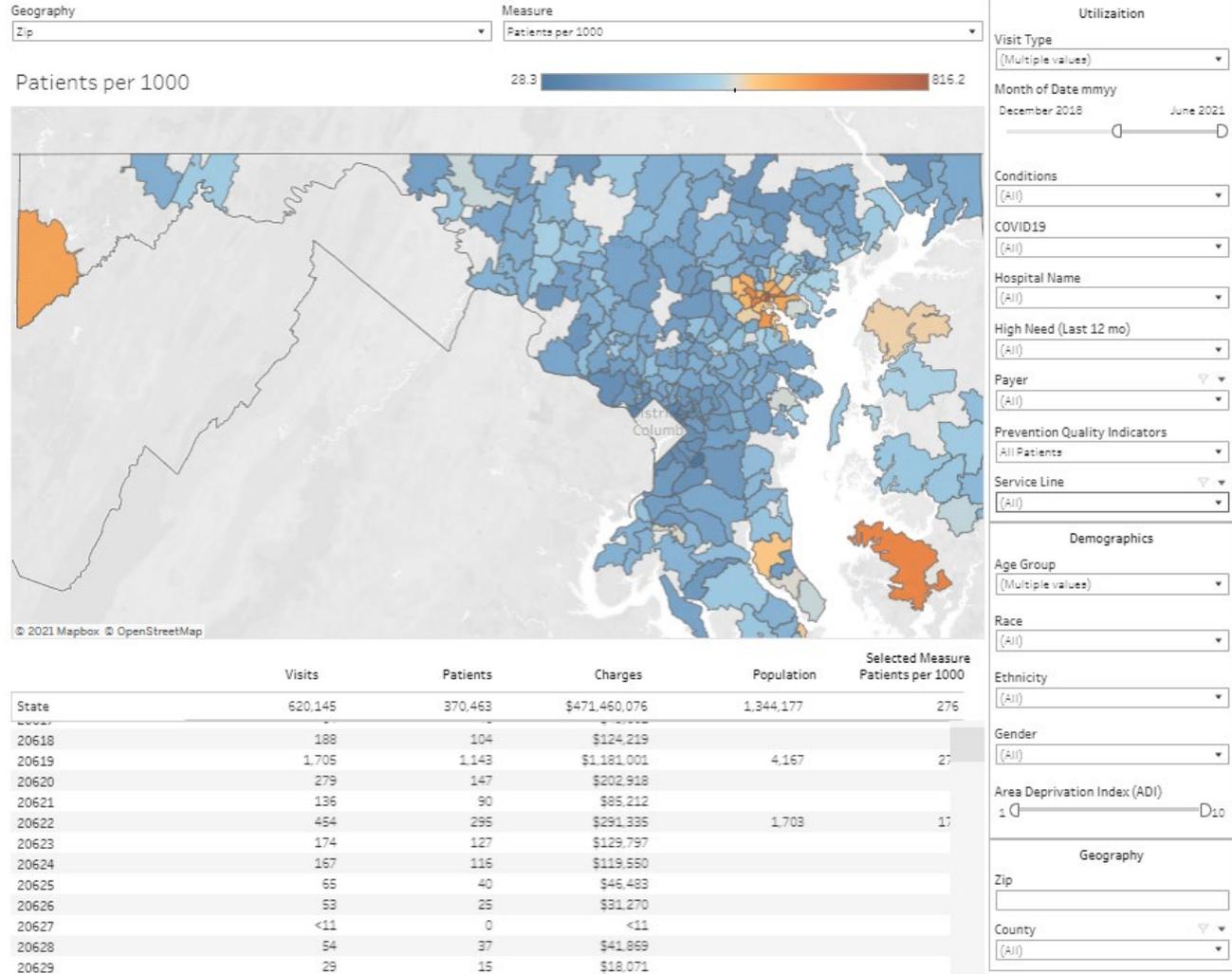


Public Health Dashboard (con't)

Public Health Dashboard

Utilization Map

The utilization map allows you to visualize various quality, financial, and utilization measures by county or zip code for your population of interest. For example, you can visualize the ED encounters per 1000 for pediatric asthma by zip code to identify areas that are most impacted.



Question:

- Which zip codes in the state have the most ED pediatric patients per population?



Public Health Dashboard (con't)

Questions:

- What are the outcomes for the geography of interest before and after an intervention time period?
- What are the racial disparities in diabetes hospitalizations in a county?

Public Health Dashboard Populations Comparison

Define a population of interest (primary) and compare it to another population. Possible analyses include comparing one calendar year to another, comparing a zip code or county to the state average, comparing different demographics or patients with different chronic conditions.

Primary Population		Utilization	
Visits Total	12,933,073	Month of Discharge Date	January 2016 <input type="text"/> June 2021 <input type="text"/>
Visits per 1000	2.154	<input type="text"/>	<input type="text"/>
Patients	3,922,096	Visit Type	<input type="text"/>
Patients per 1000	653	<input type="text"/>	<input type="text"/>
Readmit Rate	11.84%	Conditions	<input type="text"/>
PQI Rate	10.84%	<input type="text"/>	<input type="text"/>
LOS Total	25,163,835	COVID19	<input type="text"/>
LOS per Visit	1.9	<input type="text"/>	<input type="text"/>
Charges	\$63,444,886,267	Hospital Name	<input type="text"/>
Charges per Capita	\$10,568	<input type="text"/>	<input type="text"/>
Charges per Visit	\$4,906	High Need (Last 12 mo)	<input type="text"/>
Charges per Patient	\$16,176	<input type="text"/>	<input type="text"/>
Population	6,003,435	Payer	<input type="text"/>
		<input type="text"/>	<input type="text"/>
		Service Line	<input type="text"/>
		<input type="text"/>	<input type="text"/>
		Prevention Quality Indicators	<input type="text"/>
		<input type="text"/>	<input type="text"/>
		Demographics	
		Age Group	<input type="text"/>
		<input type="text"/>	<input type="text"/>
		Race	<input type="text"/>
		<input type="text"/>	<input type="text"/>
		Ethnicity	<input type="text"/>
		<input type="text"/>	<input type="text"/>
		Gender	<input type="text"/>
		<input type="text"/>	<input type="text"/>

Comparison Population		Utilization	
Visits Total	12,933,073	Month of Discharge Date	January 2016 <input type="text"/> June 2021 <input type="text"/>
Visits per 1000	2.154	<input type="text"/>	<input type="text"/>
Patients	3,922,096	Visit Type	<input type="text"/>
Patients per 1000	653	<input type="text"/>	<input type="text"/>
Readmit Rate	11.84%	Conditions	<input type="text"/>
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		Demographics	
		Age Group	<input type="text"/>
		<input type="text"/>	<input type="text"/>
		Race	<input type="text"/>
		<input type="text"/>	<input type="text"/>
		Ethnicity	<input type="text"/>
		<input type="text"/>	<input type="text"/>
		Gender	<input type="text"/>
		<input type="text"/>	<input type="text"/>



Pre/Post Reports

Data Source:

CaseMix

Key Questions:

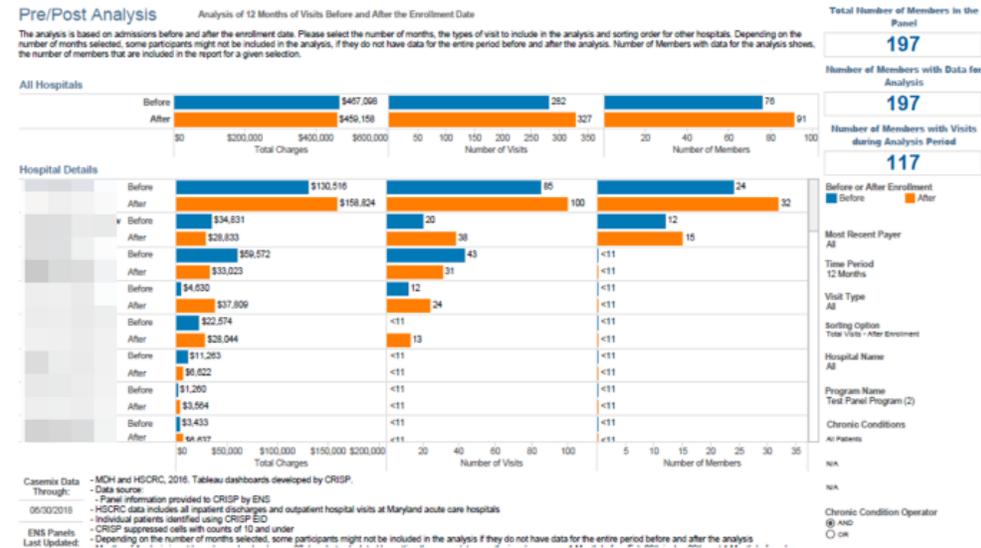
- How has my program impacted the cost and utilization of patients it reaches before and after enrollment?



Panels Reports

2. Panel Analysis

The panel analysis tab breaks down the pre and post charges, visits, and unique members by hospital. For this tab, you will need to use the filter 'Time Period' to select the time period you would like to view. There are also additional filters for most recent payer, visit type, sorting option, hospital name, and up to 3 chronic conditions.





Example of Program Reporting: SIHIS Dashboard

- Provide a simple dashboard to support Maryland Department of Health monitor progress towards SIHIS goals
- Many population health SIHIS goals use surveillance data that are lagged in reporting
- Identify proxy measures that are directionally indicative of the official SIHIS goals, but use more timely data sources



Key Elements of the SIHIS Dashboard

- The dashboard will measure the percent change from the 2018 baseline to present
- Where possible, the dashboard will include comparisons to national benchmarks or stated SIHIS targets
- Breakouts by race and ethnicity will support monitoring health equity



Visual Framework

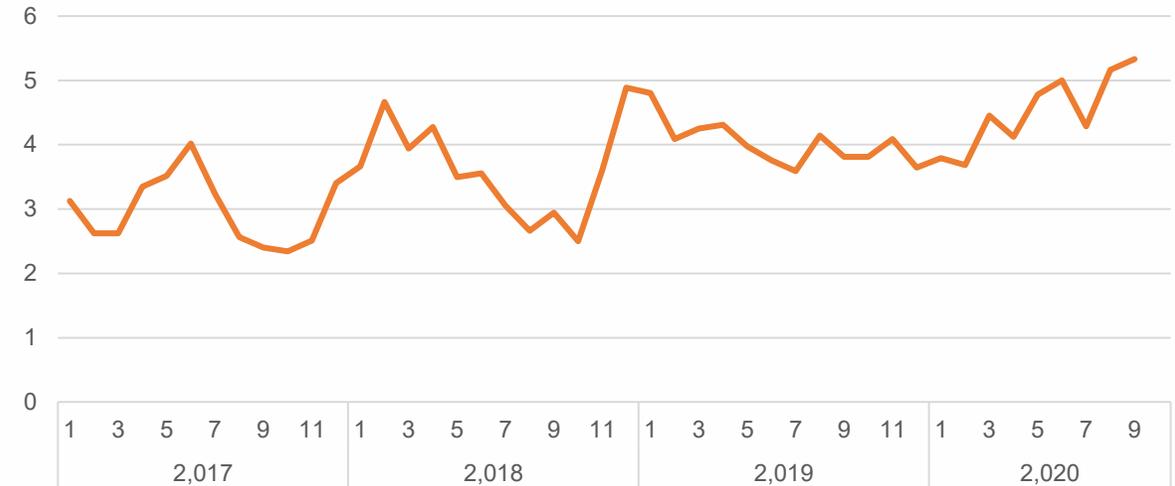
[Measure of Interest] Percent Change from Baseline and Comparison to National Average

	2018 Baseline (A)	May 2020-April 2021 (B)	Percent Change (B-A)/A	National Comparison Change
Rates/ 100k Population	37.3	41.1	10.4%	30.5%
Total Count	2,253	2,541	12.8%	32.1%

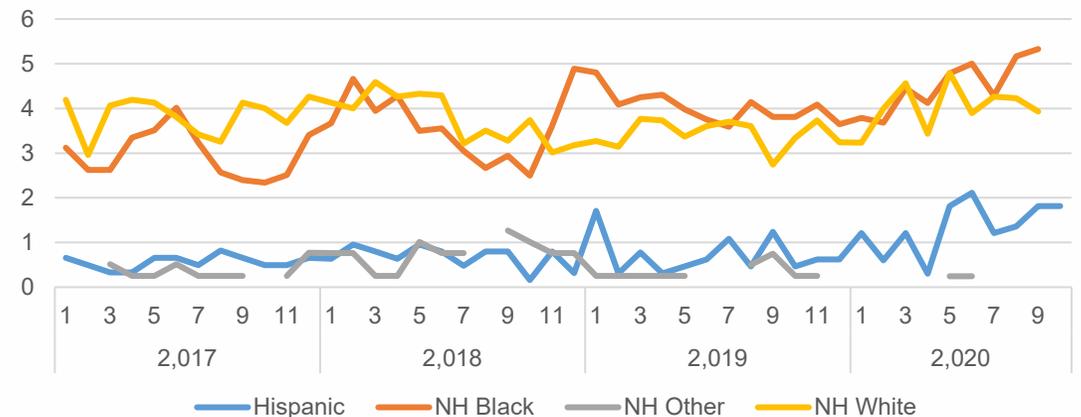
[Measure of Interest] by Race and Ethnicity Percent Change from Baseline and Disparity Index

Race/Ethnicity	2018 Baseline	Current Year (most recent rolling 12)	Percent Change	Disparity index (Race : NH White)
NH White	45.5	48.1	5.7%	1.0
NH Black	43.3	53.7	24.1%	1.1
Hispanic	8.1	14.7	81.5%	0.3
NH Other	8.0	5.7	-28.8%	0.12
Statewide Total	37.3	41.1	10.4%	

[Measure of Interest] Over Time



[Measure of Interest] Over Time by Race/Ethnicity





Examples of recommended outcomes measures possible in existing CRISP data

- Outcome measures could align with SIHIS goals
- Outcome measures could be pulled out into a dashboard for grantees
 - Pediatric ED asthma visits
 - Diabetes Hospital visits (PQI 93)
 - Severe maternal morbidity
 - Opioid overdoses
 - Discharges
 - Readmits



CRISP

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