



CRISP

Public Health Dashboard

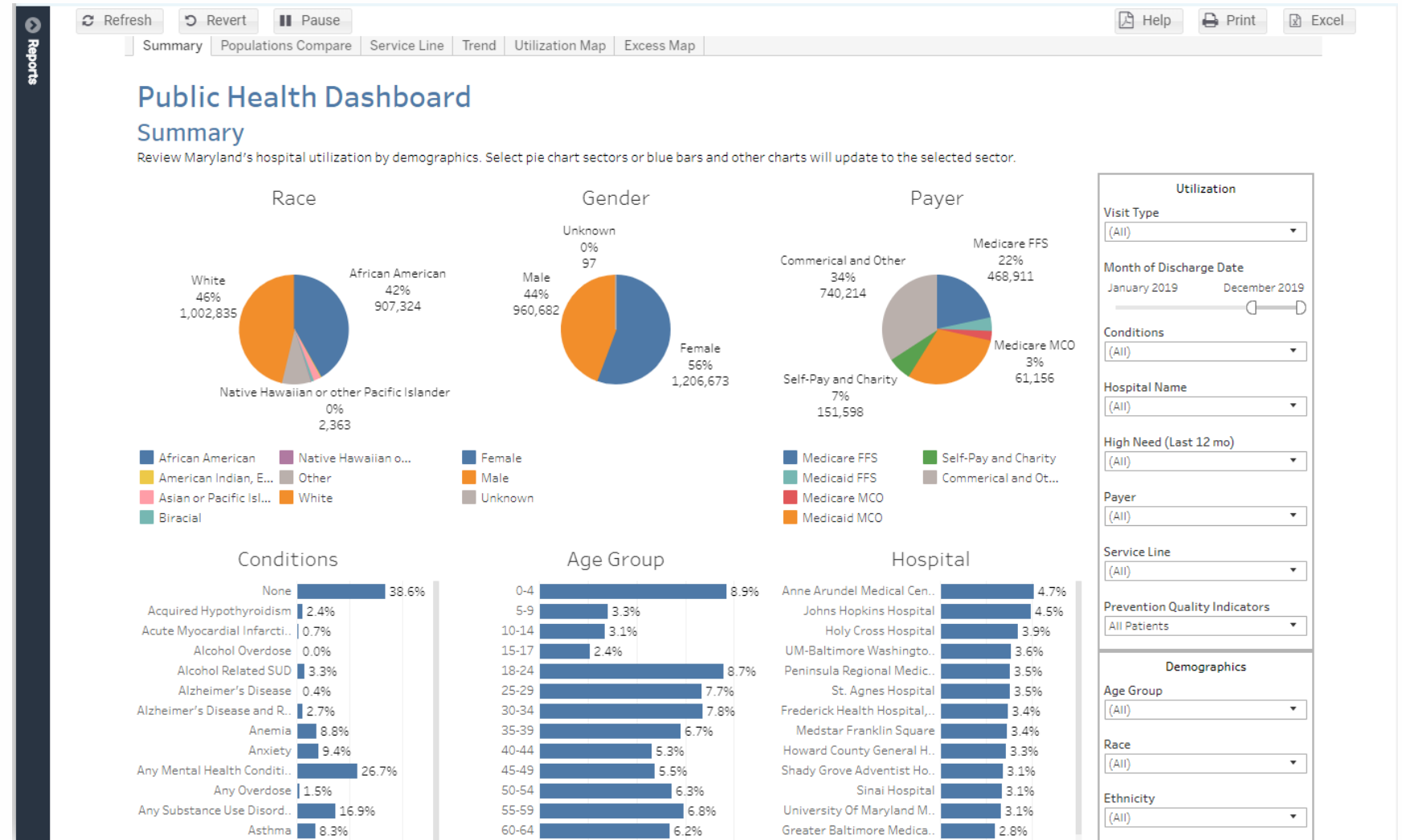
User Training Webinar - 3/17/20

7160 Columbia Gateway Drive, Suite. 230
Columbia, MD 21046
877.952.7477 | info@crisphealth.org
www.crisphealth.org



Agenda

1. Background
2. Access
3. Features
4. User Stories





Background

- The Public Health Dashboard is designed for individuals working on population health and public health, who want a deeper understanding of the community's health.
- With this dashboard, users can analyze Maryland hospital utilization and filter on metrics of interest such as demographics, conditions, geography, payer type, utilization type, and much more.
- Developed with Local Health Departments in mind to:
 - Provide access to aggregated Hospital All-Payer claims on a monthly basis
 - Provide a tool to assist with grant funding research
 - Ability to focus on 42CFR protected sensitive conditions on a summary level



Background

- Data Sources
 - **Claims** - HSCRC All-Payer Hospital Claims (referred to as the Casemix Data) for IP, OP, ED, Obs visits.
 - Refreshed monthly, Data available from Jan 2016 to most current available
 - **County/Zip Code** - values pulled from the HSCRC Casemix data.
 - Denominators derived from the American Community Survey
 - **Conditions** – Defined by ICD-9/10 Codes or CMS Chronic Condition Warehouse (CCW)
 - **Prevention Quality Indicators (PQIs)** – AHRQ methodology
 - **Readmissions** – HSCRC's Readmission Reduction Incentive Program (RRIP) definition of readmissions
 - **Service Lines** – 3M APG-DRG Grouper (IP & Obs >24Hrs.) & EAPG (OP & ED)



Access

- CRS is trying to establish Points of Contact (POCs) at every local health department to credential end users of this dashboard.
- All Hospital POCs can add this report access to users accounts by adding the 'HosID_NonPHITableau' reporting role.
- POCs will have access to a credentialing application where they can add new users with the need for any contact with CRISP
- All new users must submit a copy of the CRS end user agreement before or after they receive access to the reports



CRS LHD End User Agreement

- After every user is created, we ask CRS POCs to have them sign and return a CRS End User Agreement to a CRS Team Member
 - Grace.kaeding@crisphealth.org
- This form covers rule and requirements for accessing the data within CRS Reports



CRISP Reporting Services End User Agreement – Aggregate Reports for Community Based Organizations

I. Background

CRISP currently has a Memorandum of Understanding (MOU) with Community-Based Organizations (CBO) and other organizations (such as local health departments and other governmental agencies) that may not be HIPAA covered entities who chose to share data with CRISP. The MOU includes specific provisions governing the use of data and the relationship between CRISP and those organizations. This End User Agreement (EUA) is intended to supplement the MOU by enumerating important protections in the use of aggregate level reports. This EUA applies to reports made available through CRISP to the undersigned organization.

II. Use of Data from Aggregate Reports – End User Attestation

- I will only use reports made available through CRISP for purposes of care coordination, quality assessment, and quality improvement.
- I will not use the reports for marketing to patients or other patient outreach activities not specifically described herein as permitted.
- I understand that the purpose of these reports is to supplement my participating organization's care coordination, quality assessment, and quality improvement activities.
- I will not use CRISP reports except on behalf of my participating organization.
- I will not access reports if I am no longer employed/contracted by my participating organization.
- I will not release or publicize or permit others to release or publicize statistics where the number of observations in any given cell of tabulated data is less than or equal to ten (10).
- I will acknowledge in all reports based on these data, by direct cite where space and/or publication guidelines permit, or by inclusion in a list of data contributors available upon request, that the source is the Health Services Cost Review Commission and CRISP.



CRS Portal Login Page - <https://reports.crisphealth.org>

Welcome to the New CRISP Reporting Services (CRS) Log in Page!
We are excited to work with our partner hMetrix to bring you this streamlined experience, and we are ready to help if you have any issues. If you have any issues that are not resolved by the "Reset your password?" link below, our Customer Care Team is standing by at support@crisphealth.org and 877-952-7477

Cordially
The CRISP Reporting Services and Customer Care Teams

Log in to CRISP Reporting Services (CRS) Portal 

[Next](#)

[Reset your password?](#)

Warning: CRISP policy prohibits username and password sharing.
Violation could result in account termination.

Questions or Concerns? Please contact the [CRISP Customer Care Team](#) at support@crisphealth.org or 877-952-7477.

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Access – CRS Portal

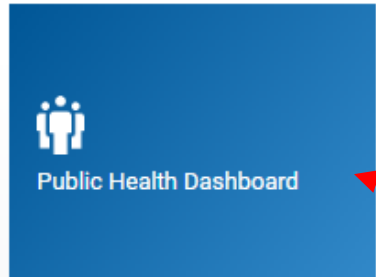


Connecting **Providers with Technology** to Improve Patient Care

CRISP REPORTING SERVICES

[Download HSCRC Regulatory Reports](#) | [Click here to send feedback](#) | [Bulletin Board](#) | [Phillip, Kevin](#) | [Logout](#)

Your Dashboard



Click the wrench and spanner icon to view a full list of cards available to you.

The card titled 'Public Health Dashboard' is the access point for the reporting suite.



How can you use this dashboard?

- Shared resource across local health departments, hospitals, and community-based organizations
- Statewide, diabetes is a priority
- Dashboard has measures to help you analyze the diabetic population in your zip codes or counties of interest and compare it to the state



Tableau Features

Refresh Revert Pause

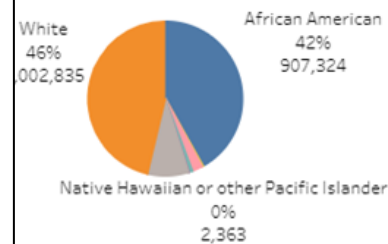
Help Print Excel

Public Health Dashboard

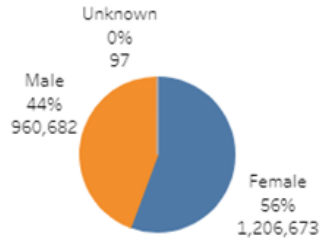
Summary

Review Maryland's hospital utilization by demographics. Select pie chart sectors or blue bars and other charts will update to the selected sector.

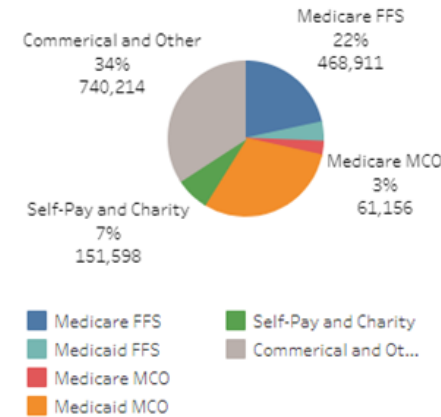
Race



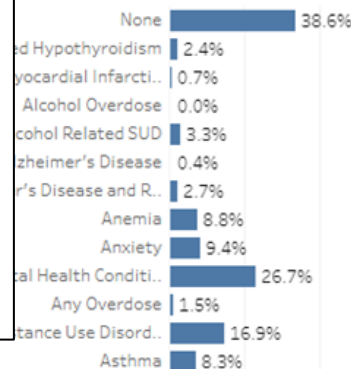
Gender



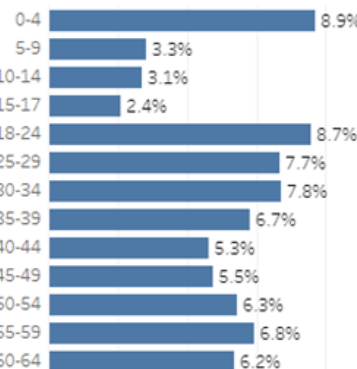
Payer



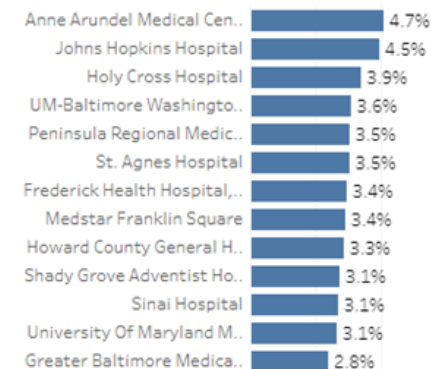
Conditions



Age Group



Hospital



Utilization

Visit Type
(All)

Month of Discharge Date
January 2019 December

Conditions
(All)

Hospital Name
(All)

High Need (Last 12 mo)
(All)

Payer
(All)

Service Line
(All)

Prevention Quality Indicator
All Patients

Demographics

Age Group
(All)

Race
(All)

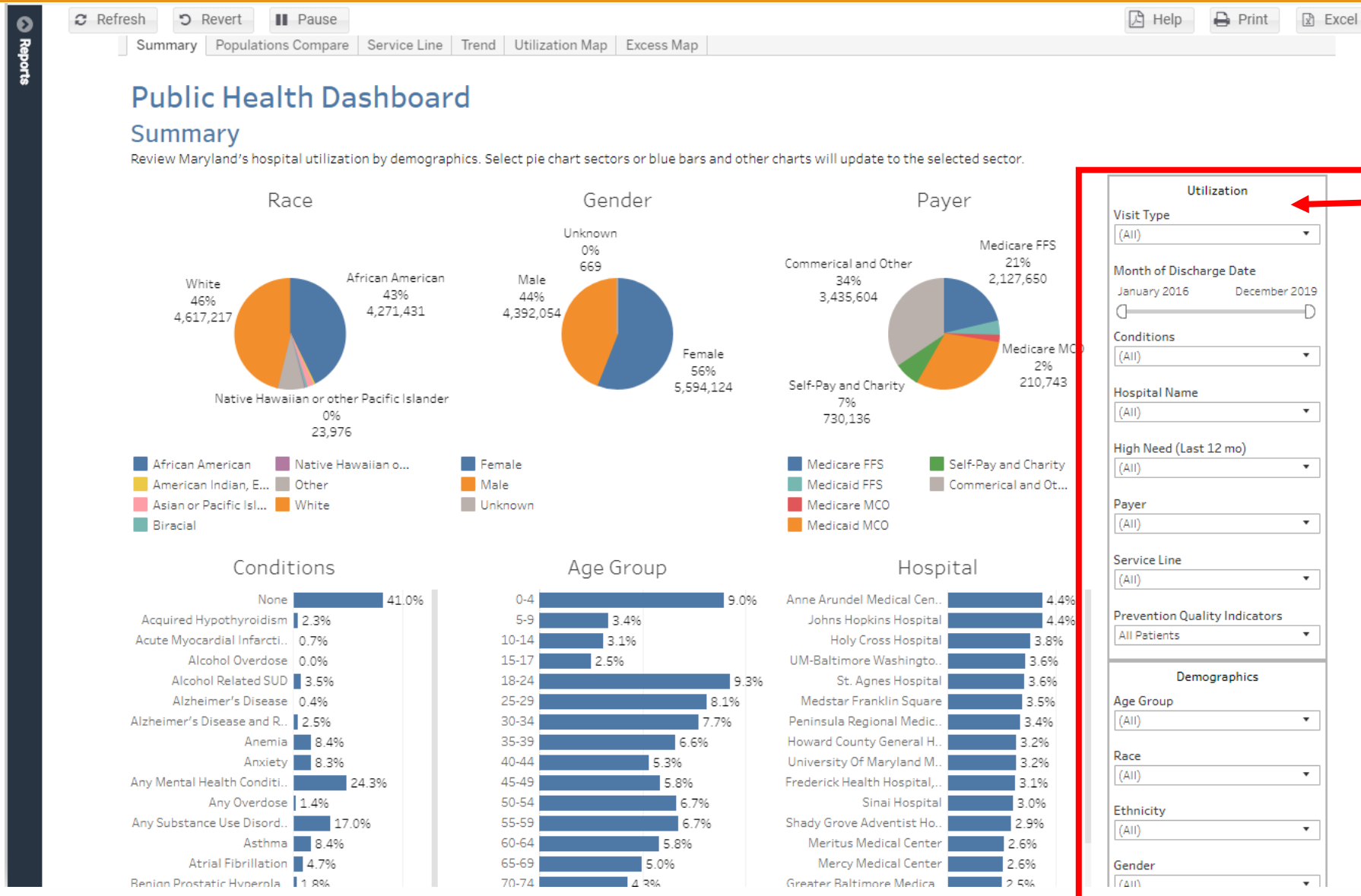
Ethnicity
(All)

- **Refresh** – Used to refresh data for complex queries
- **Revert** – restores page to default view
- **Pause** – prevents the report from loading for each filter sections. Extremely useful if making multiple sections during a session.

- **Help** – Location of the user guide
- **Print** – export view into a PDF
- **Excel** – Downloads the dataset into an excel workbook from current section filters



Filters



The first thing users will notice is primary filters that are available throughout every tab of the reporting suite. Filters made in one section of the report will persist throughout navigation of the dashboard.



Filters - Utilization

Utilization

Visit Type
(All)

Month of Discharge Date
January 2016 December 2019

Conditions
(All)

Hospital Name
(All)

High Need (Last 12 mo)
(All)

Payer
(All)

Service Line
(All)

Prevention Quality Indicators
All Patients

☒ (All)
☒ IP
☒ Obs>=24
☒ Obs<24
☒ ED
Cancel Apply

☒ (All)
☒ None
☒ Acquired Hypothyroidism
☒ Acute Myocardial Infarction
☒ Alcohol Overdose
☒ Alcohol Related SUD
☒ Alzheimer's Disease
☒ Alzheimer's Disease and Related Disorders or Senile Dementia
☒ Anemia
☒ Anxiety
☒ Any Mental Health Condition
☒ Any Overdose
☒ Any Substance Use Disorder
☒ Asthma
☒ Atrial Fibrillation
☒ Benign Prostatic Hyperplasia
☒ Cataract
☒ Chronic Kidney Disease
☒ Chronic Obstructive Pulmonary Disease and Bronchiectasis
☒ Colorectal Cancer
☒ Depression
☒ Diabetes
☒ Endometrial Cancer
☒ Fall
☒ Female / Male Breast Cancer
☒ Heart Failure
☒ Hip/Pelvic Fracture
☒ Hyperlipidemia
☒ Hypertension
☒ Ischemic Heart Disease
☒ Lung Cancer
☒ Malnutrition
☒ Non- Alcohol Related SUD
☒ Opioid Overdose
☒ Osteoporosis
☒ Prostate Cancer
☒ RA/OA (Rheumatoid Arthritis / Osteoarthritis)
☒ Stroke / Transient Ischemic Attack
☒ Suicide and intentional self-harm



Filters - Utilization

Utilization

Visit Type
(All)

Month of Discharge Date
January 2016 December 2019

Conditions
(All)

Hospital Name
(All)

High Need (Last 12 mo)
(All)

Payer
(All)

Service Line
(All)

Prevention Quality Indicators
All Patients

☒ (All)

☒ Null

☒ Anesthesia

☒ Burns

☒ Cardiology

☒ Cardiothoracic Surgery

☒ Chemotherapy

☒ Chemotherapy and Pharmacotherapy

☒ Dental

☒ Dermatology

☒ Diabetes

☒ Diagnostic Nuclear Medicine

☒ Diagnostic Radiology

☒ DME and Supplies

☒ Endocrinology

☒ Endocrinology Surgery

☒ ENT Surgery

☒ Gastroenterology

☒ General Medicine

☒ General Surgery

☒ Gynecological Surg

☒ Gynecology

☒ Hematology

☒ Hemodialysis or Peritoneal Dialysis

☒ Infectious Disease

☒ Injuries/complic. of prior care

☒ Interventional Cardiology

☒ Invalid

☒ Invasive Cardiology

☒ Laboratory

☒ Mental Health

☒ Neonatology

☒ Neurological Surgery

☒ Neurology

☒ OB/GYN

☒ Obstetrics

☒ Oncology

☒ Ophthalmologic Surg

☒ Ophthalmology

☒ Ophthalmology Surgery

☒ Orthopedic Surgery

☒ Orthopedics

☒ Otolaryngology

☒ Otolaryngology Surgery

☒ Pain Management

☒ Pathology

☒ Pharmacotherapy

☒ Preventive Care

☒ Psychiatry

☒ Pulmonary

☒ Radiology

☒ Rehabilitation

☒ Spinal Surgery

☒ Substance Abuse

☒ Thoracic Surgery

☒ Transplant Surgery

☒ Trauma

☒ Unassigned

☒ Ungroupable

☒ Urological Surgery

☒ Urology

☒ Urology and Nephrology

☒ Vascular Surgery

☒ Ventilator Support

All Patients

Overall Composite

Diabetes Composite

Acute Composite

COPD/Asthma

Congestive Heart Failure

Hypertension




Filters – Demographics & Geography

Demographics

Age Group
(All) ▼

Race
(All) ▼

Ethnicity  ▼
(All) ▼

Gender
(All) ▼

Geography

Zip

County
(All) ▼

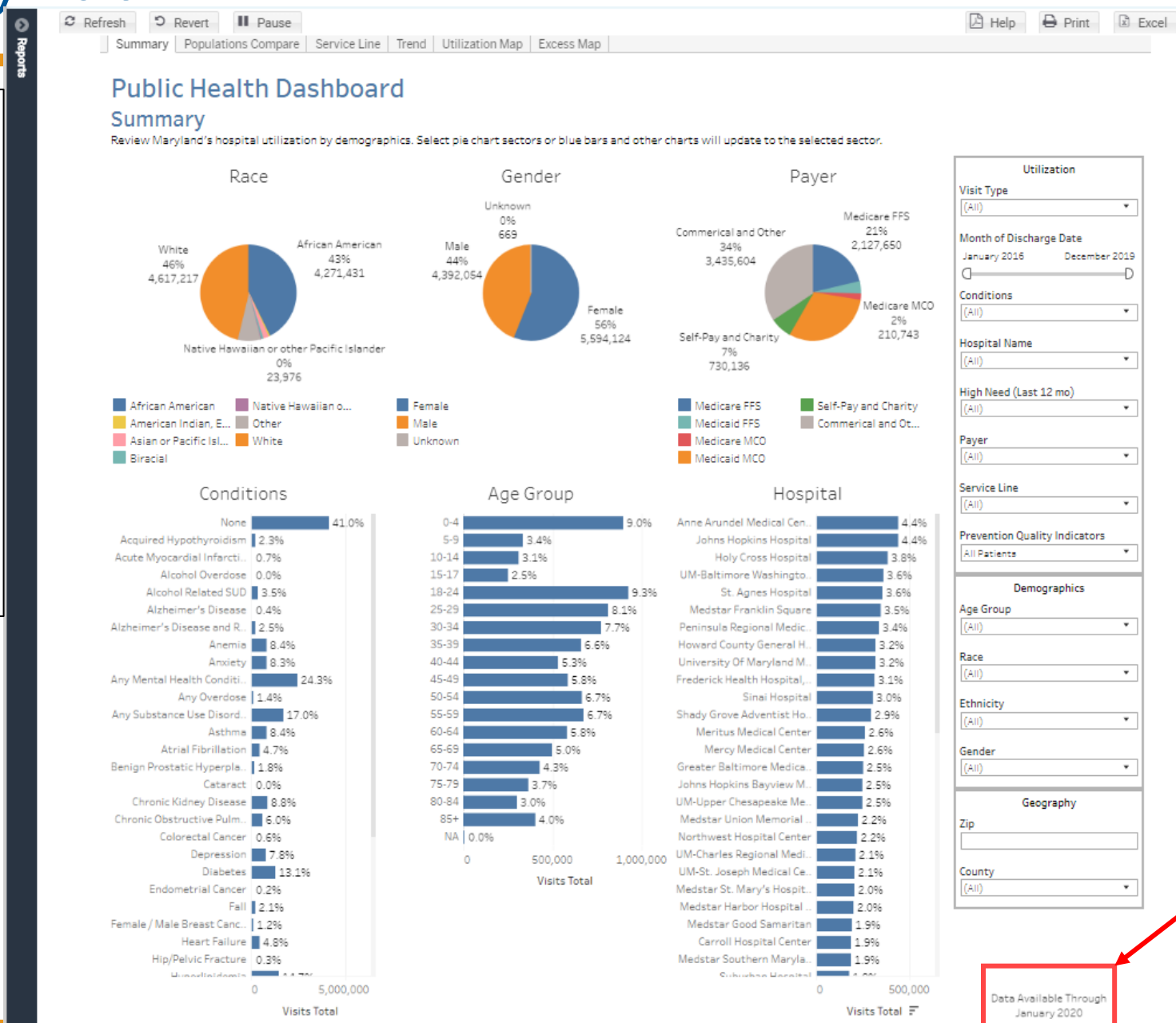
- ☒ (All)
- ☒ African American
- ☒ American Indian, Eskimo or Aleut
- ☒ Asian or Pacific Islander
- ☒ Biracial
- ☒ Native Hawaiian or other Pacific Islander
- ☒ Other
- ☒ White

- ☒ (All)
- ☒ Hispanic
- ☒ Not Hispanic
- ☒ Unknown



Summary Tab

The Summary Tab can be used by users to select primary population of interest using the available filters. This tab is a quick way for users to view population demographics and brief utilization statistics.



- Demographics displayed:
 - Race
 - Gender
 - Age

- Hospital Utilization displayed:
 - Payer
 - Conditions
 - Hospital

Data Available through indicator

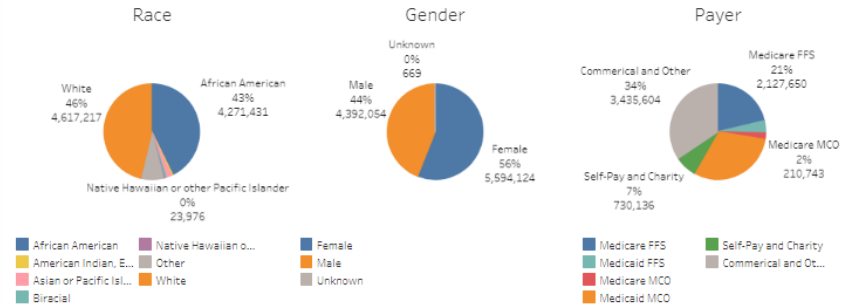


Summary Tab

Public Health Dashboard

Summary

Review Maryland's hospital utilization by demographics. Select pie chart sectors or blue bars and other charts will update to the selected sector.

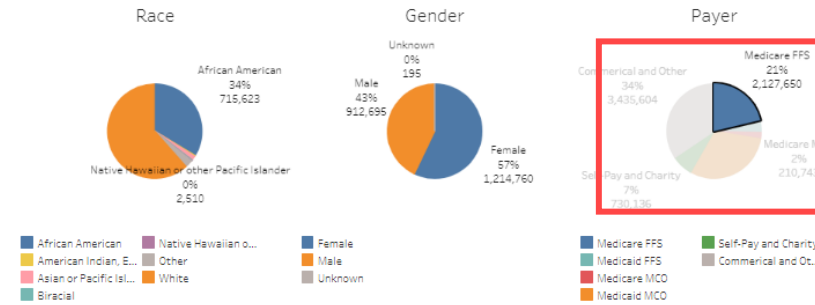


Before

Public Health Dashboard

Summary

Review Maryland's hospital utilization by demographics. Select pie chart sectors or blue bars and other charts will update to the selected sector.



After

Key Note: All graphics are selectable and will filter the other demographic and utilization categories. This example is showing the change by selecting just Medicare FFS Patients.



Population Compare

The Populations Compare tab allows users to select two different populations and view a summary of hospital utilization between the populations. The same set of filters are available for each population.

Refresh

Revert

Pause

SummaryPopulations CompareService LineTrendUtilization MapExcess Map

HelpPrintExcel

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

Visits Total	9,986,847
Patients	3,371,083
Readmit Rate	12.06%
PQI Rate	11.52%
LOS Total	18,871,521
LOS per Visit	1.9
Charges	\$44,723,746,881
Charges per Capita	\$7,746
Charges per Visit	\$4,478
Charges per Patient	\$13,267

Utilization

Month of Discharge Date
January 2016December 2019

Visit Type
(All)

Conditions
(All)

Hospital Name
(All)

High Need (Last 12 mo)
(All)

Payer
(All)

Service Line
(All)

Prevention Quality Indicators
All Patients

Demographics

Age Group
(All)

Race
(All)

Ethnicity
(All)

Gender
(All)

Geography

Zip

County
(All)

Comparison Population

Visits Total	9,986,847
Patients	3,371,083
Readmit Rate	12.06%
PQI Rate	11.52%
LOS Total	18,871,521
LOS per Visit	1.9
Charges	\$44,723,746,881
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Utilization

Month of Discharge Date
January 2016December 2019

Visit Type
(All)

Conditions
(All)

Hospital Name
(All)

High Need (Last 12 mo)
(All)

Payer
(All)

Service Line
(All)

Prevention Quality Indicators
All Patients

Demographics

Age Group
(All)

Race
(All)

Ethnicity
(All)

Gender
(All)

Geography

Zip

County
(All)



Population Compare – Measures Defined

Metric	Definition
Visits	Count of Inpatient, Observation, and/or ED visits that occurred. This measure is based on Case Mix data
Patients	Count of unique patients. This is based on Case Mix data
Visits per 1000	Visits per 1000 residents in selected geography (statewide, county, or zip). The numerator in this measure is based on Case Mix data. The denominator is based on the American Community Survey 5-year estimate.
Patients per 1000	Patients per 1000 residents selected geography (statewide, county, or zip). The numerator in this measure is based on Case Mix data. The denominator is based on the American Community Survey 5-year estimate.
Readmit Rate	Rate of readmission based on the HSCRC RRIP. The numerator is the number of RRIP readmissions based on the Case Mix data. The denominator is eligible discharges from inpatient hospital stays.
PQI Rate	Rate of PQI occurrence. The numerator is the number of visits considered a PQI based on Case Mix data. The denominator is eligible bedded care visits.
LOS	Total length of stay for all visits. Length of stay is set to one day for same day discharges. This measure is based on the Case Mix data.
LOS per Visit	Average length of stay per visit. This measure is based on the Case Mix data.
Charges	Total charges for visits. This measure is based on the Case Mix data.
Charges per Capita	Charges per residents in zip code, county or statewide. The numerator is based on the Case Mix data. The denominator is based on the American Community Survey 5-year estimates for the selected geography (statewide, county, or zip).
Charges per Patient	Average charges per patient. This measure is based on Case Mix data.
Charges per Visit	Average charges per visit. This measure is based on Case Mix data.



Service Line Comparison

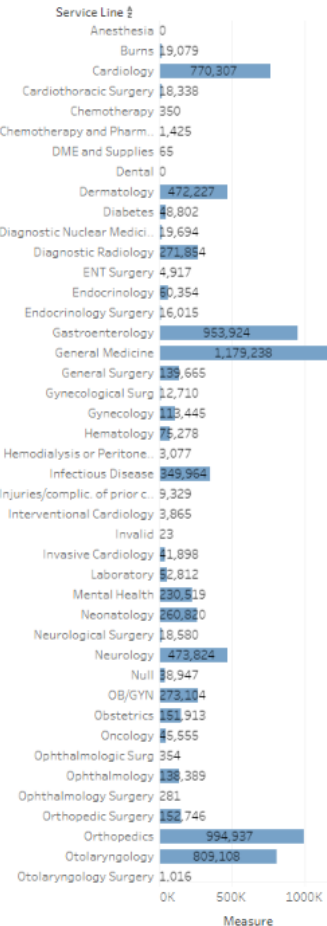
Refresh Revert Pause Help Print Excel

Summary Populations Compare Service Line Trend Utilization Map Excess Map

Public Health Dashboard Service Line Comparison

The service line indicates the primary reason a patient went to the hospital. Through this tab you can understand why your population of interest is utilizing hospital services and see if their utilization pattern is different than the comparison population.

Primary Population Visits



Utilization

Measure: Visits

Visit Type: (All)

Month of Discharge Date: January 2016 - December 2019

Conditions: (All)

Hospital Name: (All)

High Need (Last 12 mo): (All)

Payer: (All)

Service Line: (All)

Prevention Quality Indicators: All Patients

Demographics

Age Group: (All)

Race: (All)

Ethnicity: (All)

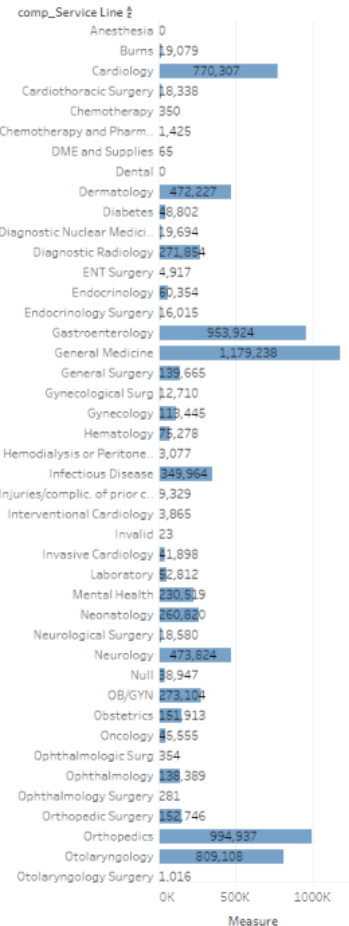
Gender: (All)

Geography

County: (All)

Zip:

Comparison Population Visits



Utilization

Visit Type: (All)

Month of Discharge Date: January 2016 - December 2019

Conditions: (All)

Hospital Name: (All)

High Need (Last 12 mo): (All)

Payer: (All)

Service Line: (All)

Prevention Quality Indicators: All Patients

Demographics

Age Group: (All)

Race: (All)

Ethnicity: (All)

Gender: (All)

Geography

County: (All)

Zip:

Data Available Through
January 2020

The Service Line comparison can help users understand the primary reason(s) patients in the selected population went to the hospital. Users can easily compare these reasons to the comparison population.



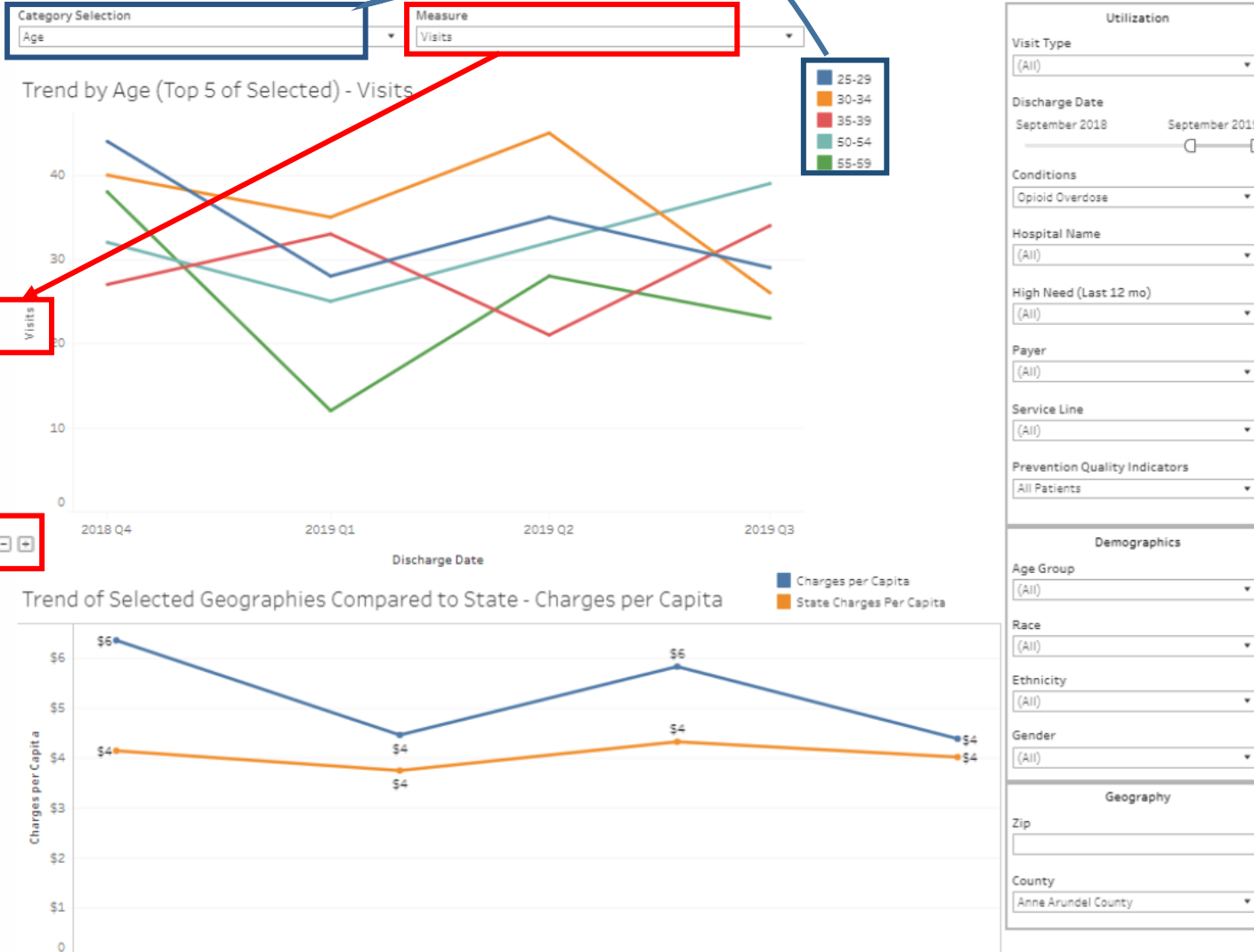
Trend by Category & Per Capita Per Month Charges

The Trend tab allows users to view differences in hospital utilizations and charges for their Primary Population with the 'Category Selection' filter. Also, the user can select different measures to view with the 'Measure' filter.

Plus/Minus buttons will change time period of the X axis.

Trend by Category and Per Capita Per Month Charges

The trend tab allows you to view differences in hospital utilization and charges by geography, payer, hospital, and demographics through the category selection drop down menu. For example, you can see if there are differences in ED utilization rates by age or race. You can also look at the charges per capita for a specific population of interest, compared to the state.



The first graph displays the category and measure selected in the filters and shows the top 5 values in the filters chosen for each category.

The second graph compares the selected geography (zip and county filters) to the state by charges per capita.



Trend by Category & Per Capita Per Month Charges

Trend by Category and Per Capita Per Month Charges

The trend tab allows you to view differences in hospital utilization and charges by geography, payer, hospital, and demographics through the category selection drop down menu. For example, you can see if there are differences in ED utilization rates by age or race. You can also look at the charges per capita for a specific population of interest, compared to the state.

Category Selection

- Age
- County
- Zip
- Hospital
- Payer
- Age
- Gender
- Race

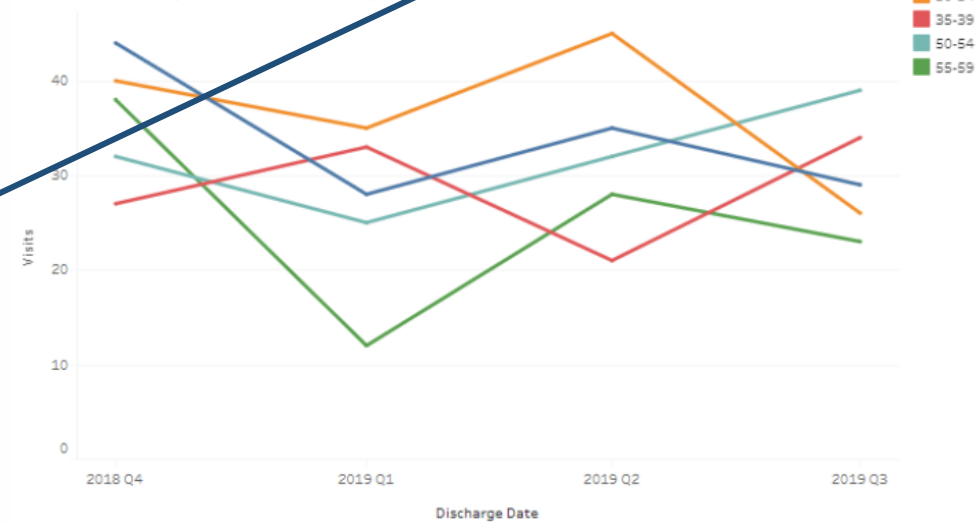
Category Selection

Age

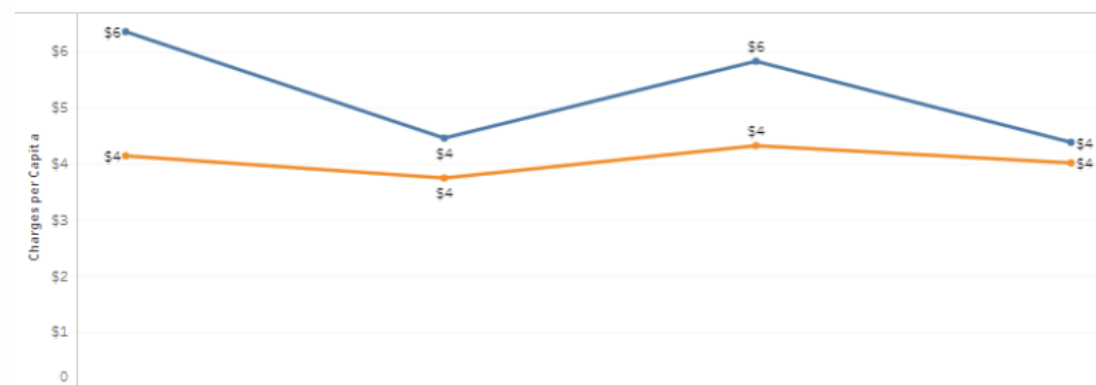
Measure

Visits

Trend by Age (Top 5 of Selected) - Visits



Trend of Selected Geographies Compared to State - Charges per Capita



Measure

- Visits
- Patients
- Visits per 1000
- Patients per 1000
- Readmit Rate
- PQI Rate
- LOS
- LOS per Visit
- Charges
- Charges per Capita
- Charges per Patient
- Charges per Visit

Utilization

Visit Type: (All)

Discharge Date: September 2018 to September 2019

Conditions: Opioid Overdose

Hospital Name: (All)

High Need (Last 12 mo): (All)

Payer: (All)

Service Line: (All)

Prevention Quality Indicators: All Patients

Demographics

Age Group: (All)

Race: (All)

Ethnicity: (All)

Gender: (All)

Geography

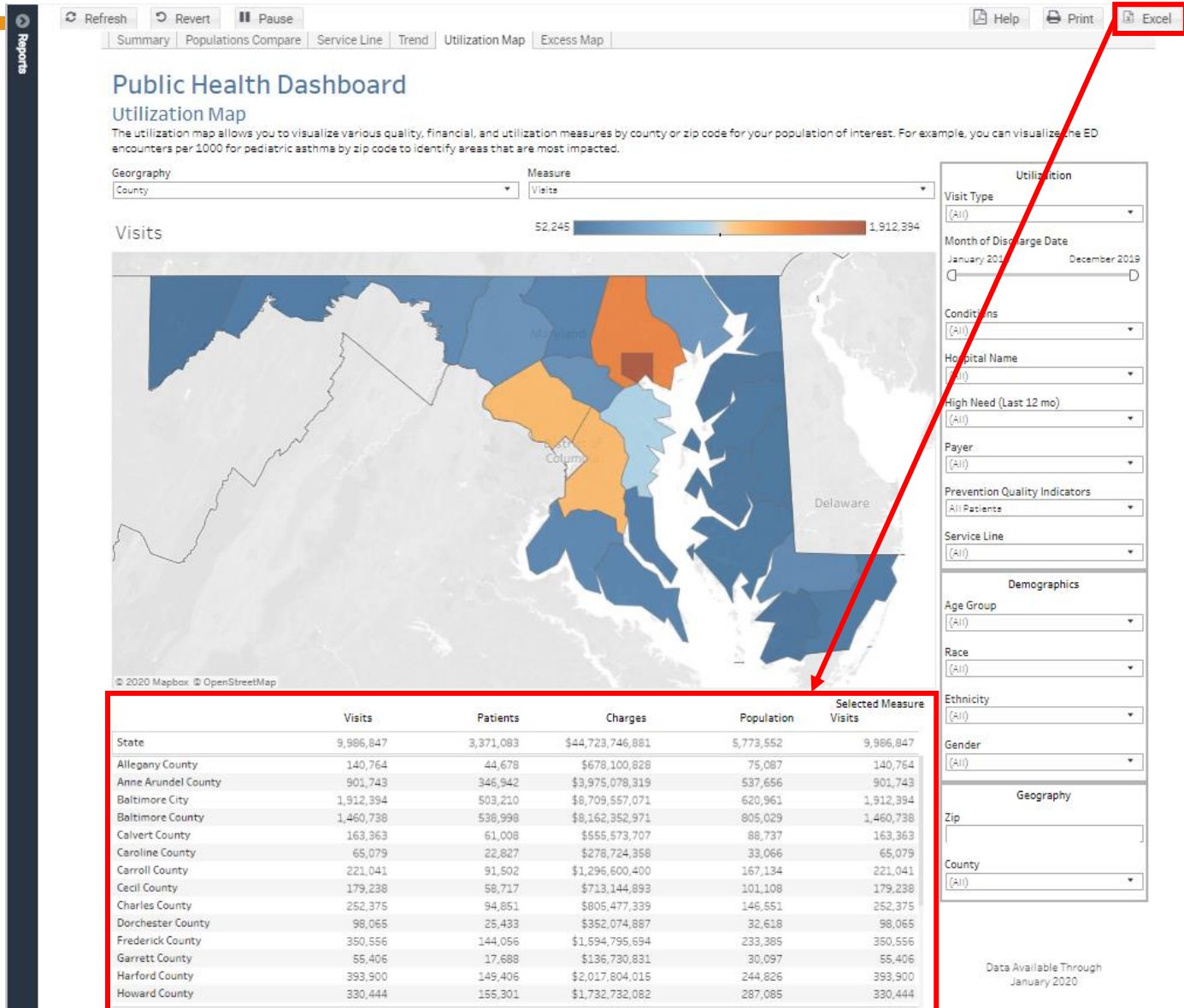
Zip:

County: Anne Arundel County



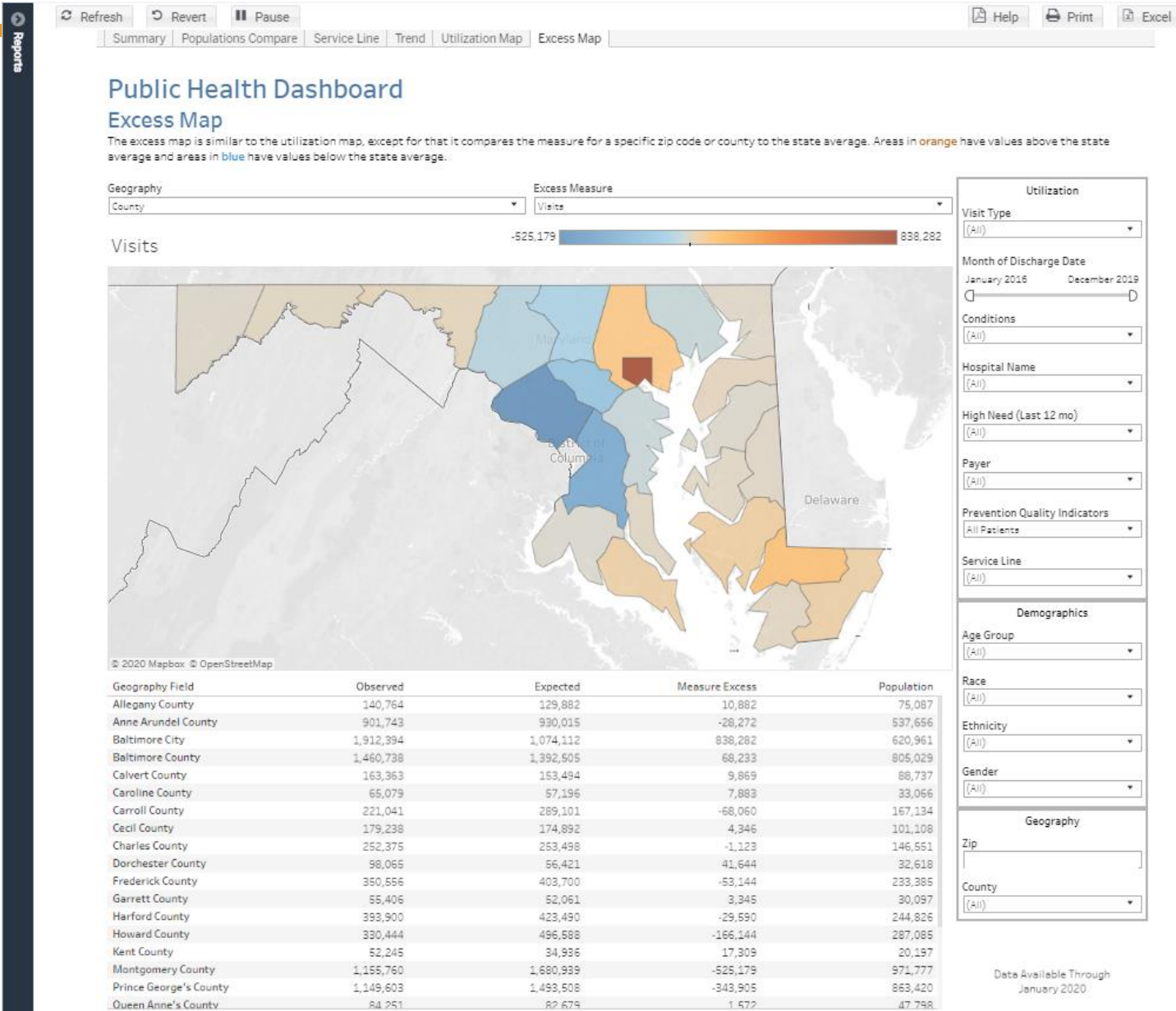
Utilization Map

The Utilization Map allows user to visualize trends by zip or county to identify areas most impacted by the measure and filters selected. The chart below the map populates with data from the measure selected by the zip or county. Users can use the excel download icon to export the data table into an excel workbook.





Excess Map



The Excess Map is similar to the utilization map but compares measure for a specific zip or county to the statewide averages. This provides users a visual of areas that are higher than statewide averages. The observed column shows the metric for that zip code or county, the expected column shows the statewide average for that metric, and the excess is the difference between those two measures. Areas in orange have values above the state average and areas in blue have values below the state average.



Excess Map

Reports

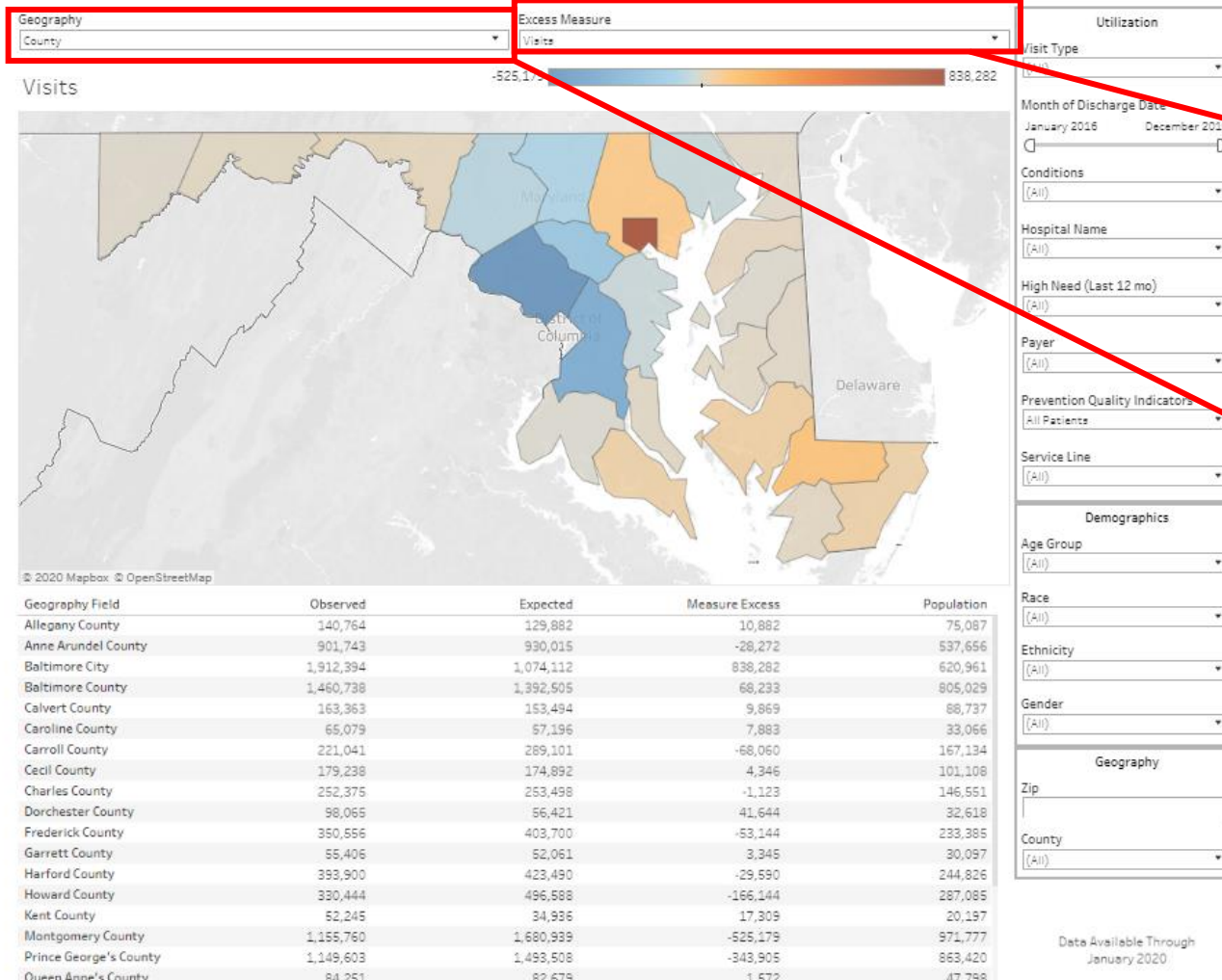
Refresh Revert Pause Help Print Excel

Summary Populations Compare Service Line Trend Utilization Map Excess Map

Public Health Dashboard

Excess Map

The excess map is similar to the utilization map, except for that it compares the measure for a specific zip code or county to the state average. Areas in orange have values above the state average and areas in blue have values below the state average.



Excess Measure

Visits

Visits

Visits per 1000

Readmit Rate

PQI Rate

LOS per Visit

Geography

County

County

Zip



User Stories

Everyone

- Shared data framework that hospitals, local health departments, and community-based organizations can access in order to support cross organizational collaborations

Hospital User

- Community benefit office wants to understand community needs
 - Can measure top conditions associated with hospitalizations
 - Prevention Quality Indicators- can be an indicator of community access to care

Local Health Department

- Local health department wants to apply for a grant to support substance use disorder
 - Can assess number of ED visits for SUD, compare with state average
 - Look at cost burden of substance use disorder ED visits
 - Trend visits over time

Community Based Organization

- Wants to partner with a hospital to reduce pediatric asthma visits
 - Can identify top hospitals to partner with depending on service area zip codes
 - Quantify number of pediatric asthma visits and costs associated
 - Assess number of children with asthma visits in target area



Support/Training

- Additional Webinar available on Thursday March 26th at 2pm; the same material will be covered
- Please email support@crisphealth.org for questions, comments, or feedback about these reports.