Public Health Dashboard
User Training Webinar - 3/17/20
Agenda

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

*More specific details can be found in the Public Health Dashboard User Guide*
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.
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
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

Email

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

Click the wrench and spanner icon to view a full list of cards available to you.
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** – Used to refresh data for complex queries
- **Revert** – Restores page to default view
- **Pause** – Prevents the report from loading for each filter section. 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
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

Visit Type
(All)

Month of Discharge Date
January 2016
December 2015

Conditions
(All)

Hospital Name
(All)

High Need (Last 12 mo)
(All)

Payer
(All)

Service Line
(All)

Prevention Quality Indicators
All Patients

Utilization

- [ ] (All)
- [ ] IP
- [ ] Obs>=24
- [ ] Obs<24
- [ ] ED

- [ ] (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

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Filters - Utilization

- Utilization
  - Visit Type
    - (All)
  - Month of Discharge Date
    - January 2016 - December 2016
  - Conditions
    - (All)
  - Hospital Name
    - (All)
  - High Need (Last 12 mo)
    - (All)
  - Payer
    - (All)

- Service Line
  - (All)

- Prevention Quality Indicators
  - All Patients

- All Patients
  - Overall Composite
  - Diabetes Composite
  - Acute Composite
  - COPD/Asthma
  - Congestive Heart Failure
  - Hypertension

- General Surgery
  - Gynecological Surg
  - Gynecology
  - Hematology
  - Hemodialysis or Peritoneal Dialysis
  - Infectious Disease
  - Injuries/Complications of Prior Care
  - Interventional Cardiology
  - Invalid
  - Invasive Cardiology
  - Laboratory
  - Mental Health
  - Neonatology
  - Neurological Surgery
  - Neurology
  - OB/GYN
  - Obstetrics
  - Oncology
  - Ophthalmology
  - Ophthalmology Surgery
  - Orthopedic Surgery
  - Orthopedics
  - Otolaryngology
  - Otolaryngology Surgery
  - Pain Management
  - Pathology
  - Pharmacotherapy
  - Preventive Care
  - Psychiatry
  - Pulmonology
  - Radiology
  - Rehabilitation
  - Spinal Surgery
  - Substance Abuse
  - Thoracic Surgery
  - Transplant Surgery
  - Trauma

- Unassigned
- Ungroupable
- Urological Surgery
- Urology
- Urology and Nephrology
- Vascular Surgery
- Ventilator Support
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.

- **Data Available through indicator**
  - Demographics displayed:
    - Race
    - Gender
    - Age
  - Hospital Utilization displayed:
    - Payer
    - Conditions
    - Hospital
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.
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.
<table>
<thead>
<tr>
<th>Metric</th>
<th>Definition</th>
</tr>
</thead>
<tbody>
<tr>
<td>Visits</td>
<td>Count of Inpatient, Observation, and/or ED visits that occurred. This measure is based on Case Mix data.</td>
</tr>
<tr>
<td>Patients</td>
<td>Count of unique patients. This is based on Case Mix data</td>
</tr>
<tr>
<td>Visits per 1000</td>
<td>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.</td>
</tr>
<tr>
<td>Patients per 1000</td>
<td>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.</td>
</tr>
<tr>
<td>Readmit Rate</td>
<td>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.</td>
</tr>
<tr>
<td>PQI Rate</td>
<td>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.</td>
</tr>
<tr>
<td>LOS</td>
<td>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.</td>
</tr>
<tr>
<td>LOS per Visit</td>
<td>Average length of stay per visit. This measure is based on the Case Mix data.</td>
</tr>
<tr>
<td>Charges</td>
<td>Total charges for visits. This measure is based on the Case Mix data.</td>
</tr>
<tr>
<td>Charges per Capita</td>
<td>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).</td>
</tr>
<tr>
<td>Charges per Patient</td>
<td>Average charges per patient. This measure is based on Case Mix data.</td>
</tr>
<tr>
<td>Charges per Visit</td>
<td>Average charges per visit. This measure is based on Case Mix data.</td>
</tr>
</tbody>
</table>
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.
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.

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.

Plus/Minus buttons will change time period of the X axis.
Trend by Category & 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 ER 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.

Trend by Age (Top 5 of Selected) - Visits

Trend of Selected Geographies Compared to State - Charges per Capita
The Utilization Map allows users 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.
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

Public Health Dashboard
Excess Map

This excess map is similar to the utilization map, except 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.

<table>
<thead>
<tr>
<th>Geography</th>
<th>Excess Measure</th>
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</thead>
<tbody>
<tr>
<td>County</td>
<td></td>
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</table>

Visits

<table>
<thead>
<tr>
<th>Blanks of Discharge Date</th>
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<tbody>
<tr>
<td>January 2018</td>
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<tr>
<td>December 2018</td>
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</tbody>
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<table>
<thead>
<tr>
<th>Conditions</th>
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<table>
<thead>
<tr>
<th>Hospital Name</th>
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<table>
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<tr>
<th>High Blood (last 12 mo)</th>
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<tr>
<th>Race</th>
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<tr>
<th>Prevention Quality Indicators</th>
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<tr>
<th>Site Characteristics</th>
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<table>
<thead>
<tr>
<th>Service Line</th>
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<th>Age Group</th>
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<th>Demographics</th>
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<table>
<thead>
<tr>
<th>Geographical Group</th>
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<tr>
<th>Zip</th>
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Data Available Through
January 2020

County

Zips

Excess Measure

Visits

Visits per 1000

Readmit Rate

PQI Rate

LOS per Visit
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.