



maryland  
**health services**  
cost review commission

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## FY 2021 Quarter 4 Data Forum

June 11, 2021

# Agenda

- **Announcements (HSCRC Staff)**
  - Case Mix Weights and Grouper Transition Update (Denise/Andi)
  - Quality Update (Dianne/Andi)
  - Reminders:
    - New Reports Available on DAVE and CRISP Portal (Claudine)
    - FY 2022 Formats and Edits Timeline (Oscar)
    - Data Forum Survey (Oscar)
- **Data Repository Vendor Update (Jen Vogel, SPG)**
- **Data Processing Vendor Update (Mary Pohl, hMetrix/Burton Policy)**
- **Case Mix Audit Vendor Update (Brenda Watson, AGS)**
- **Validating Race and Ethnicity Data (Brian Burkhalter, MHA)**
- **Next Meeting**
- **Appendix 1-3: FY 2022 DSR and Edit Updates**

# Grouper Transition: Case Mix Weights - Rate Year 2023

	<b>Temporary Market Shift (Jan – Jun)</b>	<b>Full Year Market Shift (Jan – Dec)</b>
<b>APR/EAPG Version</b>	IP Weights: 37.1* OP Weights: 3.15	IP Weights: 38 OP Weights: 3.16
<b>Data Period Used</b>	**May use CY 2019, applied to CY 2022	May use CY 2019, applied to CY 2022
<b>Implementation Date</b>	January 2023	July 2023

\*Updated from version 37 to incorporate ICD-10 codes for coronavirus. Outpatient Case Mix Weights (based upon 15 months (CY 2019 – March 2020), and Inpatient Case Mix Weights (based upon 12 months CY2019).

\*\*HSCRC will be convening a workgroup to discuss Market Shift and Weight development with the industry. More information is forthcoming.

The weights for FY 2022 are still undergoing QA. 3M made a multitude of changes to its grouper which had unforeseen consequences on the weights. Thus, the development and QA of the weights and the process is taking longer than usual. When the weights are posted, HSCRC will create a de-identified dataset (with programs) for parties interested in recreating the weight calculations. Please submit a request to [hscrc.data-requests@maryland.gov](mailto:requests@maryland.gov).

# Grouper Transition: Market Shift (TENTATIVE) – Rate Year 2023

	<b>Temporary Market Shift* (Jan – Jun)</b>	<b>Full Year Market Shift (Jan – Dec)</b>
<b>APR/EAPG Version</b>	APR: 37.1** EAPG: 3.15	APR: 38 EAPG: 3.16
<b>Data Period Used: Base Period Performance Period</b>	January – June 2021 January – June 2022	January – December 2021 January – December 2022
<b>Implementation Date</b>	January 2023	July 2023

\*Due to COVID-19 impacts on volume, HSCRC will decide on the grouper version at a future date. More information to come on the timing and availability. \*\*Updated from version 37 to incorporate ICD-10 codes for coronavirus.

# Grouper Transition: MHAC, RRIP, QBR for **CY 2021**

<b>Rate Year</b>	RY2023
<b>APR/PPC Version</b>	38 (Updated from version 37.1 to incorporate annual 3M updates)
<b>Timeline</b>	<p><u>Base Year:</u></p> <ul style="list-style-type: none"> <li>• MHAC: CYs 2018-2019</li> <li>• QBR-Mortality: CY 2019</li> <li>• RRIP: CY 2018</li> </ul> <p><u>Performance Year:</u></p> <ul style="list-style-type: none"> <li>• All Programs: CY 2021 (longer timeframe for MHAC for small hospitals TBD; presently CYs <b>2019</b> and 2021)</li> </ul> <p><u>RY 2023 and COVID:</u> Current policies will include COVID patients, subject to 3M grouper logic (e.g. 3M's v38 PPC grouper will not assign many PPCs to COVID positive patients); this decision will be evaluated retrospectively.</p> <p>For the latest on COVID, please visit <a href="https://hscrc.maryland.gov/Pages/COVID-19.aspx">https://hscrc.maryland.gov/Pages/COVID-19.aspx</a></p>
<b>Implementation Date</b>	RY 2023 policies begin Jan 1, 2021, in most cases. Look for base period and performance period reports on the CRS Portal.



# Quality Update: RY 2022 and COVID-19 Public Health Emergency

Data Concerns	Determination
<p>RY 2022 (CY 2020): Only 6 months of CY 2020 may be used:</p> <ol style="list-style-type: none"> <li>1. Is 6-months data reliable?</li> <li>2. Consider fall 2020 surge of COVID-19 cases</li> </ol>	<ul style="list-style-type: none"> <li>• Use 2019 data to inform RY 2022 revenue adjustments</li> </ul>
<p>Clinical concerns over inclusion of COVID patients (e.g., assignment of respiratory failure as an in-hospital complication)</p>	<ul style="list-style-type: none"> <li>• Remove COVID patients from all measures of quality in CY 2020 derived from case-mix data</li> <li>• <b>Please note: RY 2022 quality performance (with and without COVID patients) is available on the CRS Portal for hospital review.</b></li> </ul>
<p>Case-mix adjustment concerns:</p> <ol style="list-style-type: none"> <li>1. Inclusion of COVID patients when not in normative values</li> <li>2. Impacts on other DRG/SOI of COVID PHE</li> </ol>	<ul style="list-style-type: none"> <li>• Use 2019 data to inform RY 2022 revenue adjustments</li> </ul>

For more information on RY 2022 pay-for-performance programs, please see the Quality Performance Measurement Work Group [website](#).

# Quality Update: RY 2023 and COVID-19 Public Health Emergency

Data Concerns	Potential Options
<p>RY 2023 (CY 2021) How do we understand fall/winter 2020/2021 surge of COVID-19 cases and impacts of such issues as:</p> <ol style="list-style-type: none"> <li>1. Seasonality</li> <li>2. Reliability/Validity of smaller volume of eligible discharges?</li> <li>3. Vaccine rollout and reduction in COVID cases</li> </ol>	<ul style="list-style-type: none"> <li>● Quality reports do include COVID patients at this time, per RY 2023 approved policies</li> <li>● Retrospective assessment of case-mix adjustment</li> </ul>
<p>Clinical concerns over inclusion of COVID patients – Some have been addressed by 3M; others remain</p>	<ul style="list-style-type: none"> <li>● Consider re-integration of COVID patients into all-payer measures; evaluate retrospectively.</li> </ul>
<p>Case-mix adjustment concerns:</p> <ol style="list-style-type: none"> <li>1. Inclusion of COVID patients when not in normative values</li> <li>2. Impacts on other DRG/SOI of COVID PHE</li> </ol>	<ul style="list-style-type: none"> <li>● TBD pending analysis of CY 2020 and CY 2021 normative values</li> </ul>

# Reminder: New Reports Available on DAVE and CRISP Portal

## DAVE

- EHR Information
  - Document EHR system in use at hospitals
  - Review and update the data at least once every six months
  - For questions, contact [hscrcteam@hmetrix.com](mailto:hscrcteam@hmetrix.com)
- Financial Reconciliation
  - Download reconciliation reports between case mix and financial data
  - Submit completed reports to [hsrcrc.reconciliation@maryland.gov](mailto:hsrcrc.reconciliation@maryland.gov)

## CRISP

- CDS-A Reports
  - Review hospital high-cost drug utilization for outlier dosage units based on 3<sup>rd</sup> Monthly case mix data
  - Information used to correct errors prior to submission of Quarterly case mix data
    - Outliers that were flagged last quarter have not been corrected
  - For access, contact your CRS portal Point of Contact or [support@crisphealth.org](mailto:support@crisphealth.org)



# Reminder: FY 2022 Formats and Edits Implementation Timeline

Aug 1,  
2021

- DAVE TEST sandbox available;
- New edits are flagged as warnings
- Submit discharges on or after July 1, 2021

Sept 1,  
2021

- **FY 2021** Edits and Formats in effect for
  - FY 2022 July and August Monthly (due Aug 16 & Sept 15, respectively)
  - FY 2021 Q4 (due Aug 30)

Oct 1,  
2021

- **FY 2022** Edits and Formats in effect for
  - FY 2022 Sept and Oct Monthly (due Oct 15 & Nov 15, respectively)
  - FY 2022 Q1 (due Nov 29)

# Reminder: Complete the Data Forum Survey!

- Opportunity to provide feedback on
  - Meeting logistics (meeting notice, registration, ease of participation)
  - Topics covered during the prior meeting
  - Topics for discussion for future meetings
- After this Data Forum, participants will receive a link to a survey via Survey Monkey
- Questions about the survey: contact [hscrcteam@hmetrix.com](mailto:hscrcteam@hmetrix.com)

# Data Repository Vendor Update: Secure File Transfer

## St. Paul Introduction

As first released to the industry late 2020,  
St. Paul is proud to introduce RDS  
(Repository Data Submissions)!

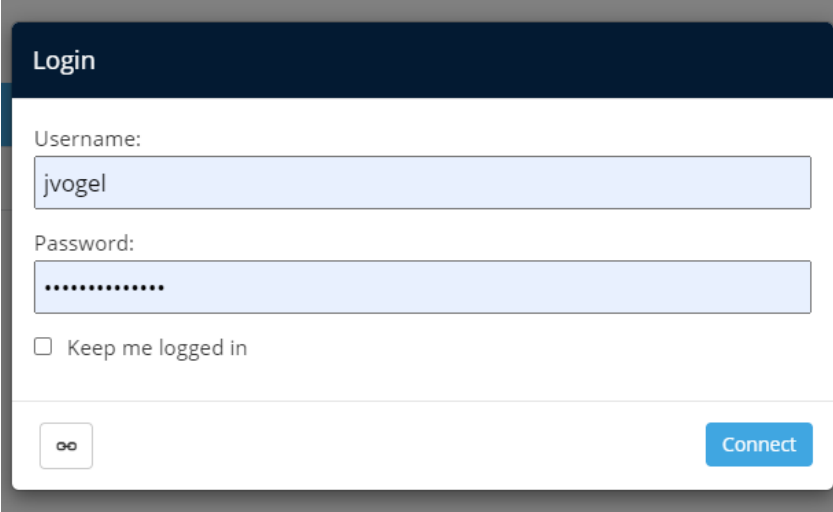
RDS will replace the existing Repliweb system that you currently use to submit your HSCRC Casemix data.

RDS will offer an easy-to-use web interface much like Repliweb, but also allow users to automate their data submission process by adding additional submission methods beyond the web interface.

# Accessing Repository Data Submission (RDS)

[rds.thestpaulgroup.com](https://rds.thestpaulgroup.com)

Log in using SCA  
credentials  
(Secure Client Access)



The screenshot shows a login form titled "Login" with a dark blue header. Below the header, there are two input fields: "Username:" with the text "jvogel" and "Password:" with masked characters "\*\*\*\*\*". Below the password field is a checkbox labeled "Keep me logged in" which is unchecked. At the bottom left of the form is a small icon of a person, and at the bottom right is a blue button labeled "Connect".



# RDS Home Page

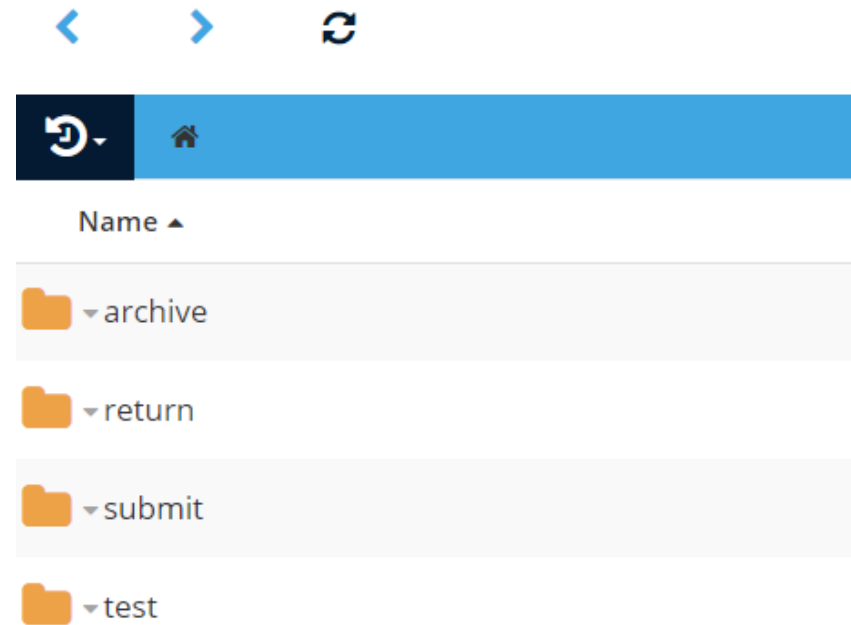
The screenshot shows a web browser window with the URL `rds.thestpaulgroup.com`. The browser's address bar and tabs are visible at the top. The main content area displays a file browser interface with a blue header bar containing the `st.paul` logo and a menu icon. Below the header, there is a table listing files and folders. The table has columns for Name, Size, Changed, and Permissions. The listed items are folders: `-archive`, `-return`, `-submit`, and `-test`, all of which were last changed on May 7, 2021, and have permissions of `drwxr-xr-x`. At the bottom of the interface, there is a toolbar with various icons for file operations like upload, download, delete, and search.

Name	Size	Changed	Permissions
-archive		May 7, 2021	drwxr-xr-x
-return		May 7, 2021	drwxr-xr-x
-submit		May 7, 2021	drwxr-xr-x
-test		May 7, 2021	drwxr-xr-x

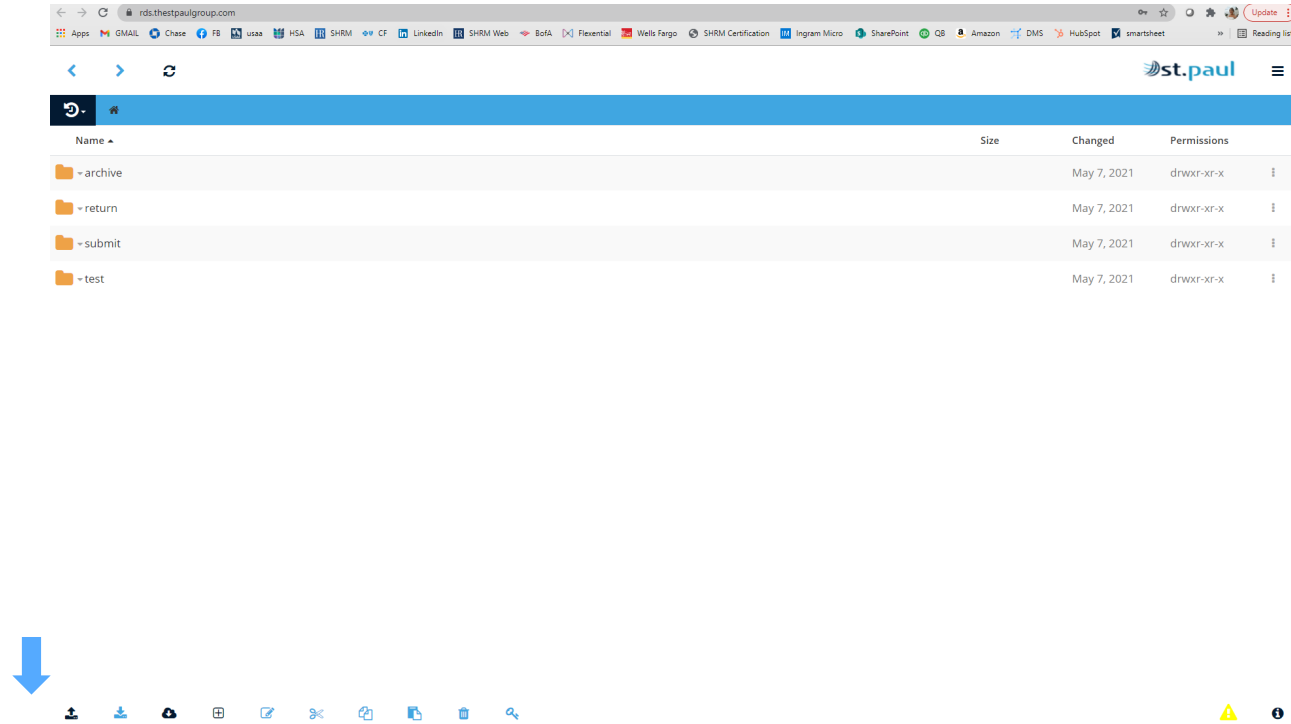
# RDS Folder Structure

## 4 Folders

- Archive
- Return
  - (Future Release)
- Submit
- Test



# Uploading and Submission



Choose Folder

- Test
- Submit

Upload File

- Click upload in bottom left corner
- Select File

Submit

- Submit file to data processing vendor

# Additional Folders

Name	Size	Changed	Permissions
-archive		May 7, 2021	drwxr-xr-x
-return		May 7, 2021	drwxr-xr-x
-submit		May 7, 2021	drwxr-xr-x
-test		May 7, 2021	drwxr-xr-x

Archive Folder

- Record of files submitted

Return Folder

- FUTURE RELEASE
- Files returned from data processing vendor

## Confirmation and Documentation

Successful submission will trigger email confirmation to end user.

Data processing vendor will receive notification of submitted files.

Files will be maintained in ARCHIVE folder for end user for 3 months.



# RDS Roll Out

We anticipate starting the new fiscal year on RDS. Hospitals will be notified when to start using the new submission process.

Be on the lookout for emails from the Operations team at St. Paul which will contain account credentials for the new system.

You should receive two emails.

1. Alert that your account was created.
2. A secure email that will direct you to an online portal to retrieve the message.

Please don't be worried, neither of these messages are spam.

# Data Processing Vendor Update

# Points of Contact

## HSCRC

### **Claudine Williams**

Phone: (410) 764-2561

Email: [claudine.williams@maryland.gov](mailto:claudine.williams@maryland.gov)

### **Oscar Ibarra**

Phone: (410) 764-2566

Email: [oscar.ibarra@maryland.gov](mailto:oscar.ibarra@maryland.gov)

## hMetrix / Burton Policy

### **Maria Manavalan** (Primary PoC)

Phone: (484) 222-3055

Email: [maria@hmetrix.com](mailto:maria@hmetrix.com)

### **Mary Pohl** (Hospital Support)

Phone: (410) 274-3926

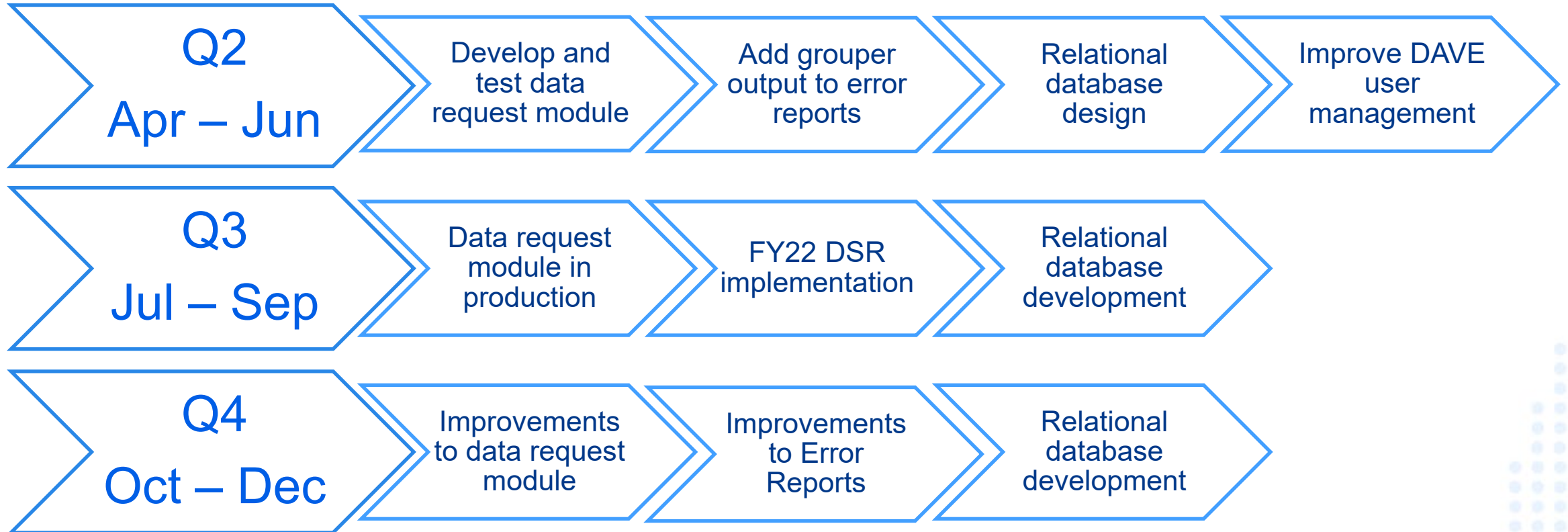
Email: [marypohl@burtonpolicy.com](mailto:marypohl@burtonpolicy.com)

**Team Email:** [hscrcteam@hmetrix.com](mailto:hscrcteam@hmetrix.com)

# Reminders

- **Production data**
  - Submit to HSCRCIP, HSCRCOP, and HSCRC-Psych distribution list in Repliweb
  - After cut over to the new RDS system – upload files to the submit folder
  - Download error reports from <https://hscrcdave1.hmetrix.com/>
- **Test data**
  - Submit to TESTIP, TESTOP, and TESTPSY distribution list in Repliweb
  - After cut over to the new RDS system – upload files to the test folder
  - Download error reports from <https://hdavetest.hmetrix.com/>
  - Available all the time for testing
- Use DAVE to notify HSCRC & hMetrix if you want to use the Monthly submission as the Quarterly submission

# CY 2021 Roadmap for Continuous Improvements to DAVE





# Case Mix Audit Vendor Update

# Case Mix Audit Reminders

- **Point of Origin**
  - Assisted living facility is reported with the designation (05) from skilled nursing facility(SNF), Intermediate Care Facility, or Assisted Living Facility.
- **Discharge Disposition**
  - Designation (62) is to an Inpatient Rehabilitation Facility (IRF) or Rehabilitation Distinct Part Unit of A Hospital.
  - Designation (03) SNF would include skilled nursing facilities that provide rehabilitation services.
- **Mapping**
  - Verify and test that all outpatient CPT/HCPCS codes and modifiers captured in the abstract are reported in the case mix data.

# Validating Race and Ethnicity Data

# MHA REAL CASEMIX ACCURACY ASSESSMENT



# MHA REAL CASEMIX ACCURACY ASSESSMENT



Maryland hospitals and MHA are committed to improving REaL data in order to better identify health inequities



Accurate patient self-identification increases the opportunity to precisely identify potential health inequities and prioritize interventions



Using REaL data to identify health inequities should never stop because of patient-self identification accuracy concerns. The only way to identify health inequities and improve capturing patient self-identification is to *routinely assess and stratify REaL data*.

## Our Project Objectives

As part of our health equity commitment, we've partnered with KPMG to assess the accuracy of capturing patient self-identification in the HSCRC IP case-mix REaL data:

- Research and recommend a best-practice accuracy framework for assessing REaL data
- Research and document REaL accuracy efforts performed to date by MHA, CRISP, HSCRC and hospital field
- Apply the accuracy framework to assess current state
- Make recommendations for next steps

# REAL DATA ACCURACY FRAMEWORK ADAPTED FROM AHA & CMS

## Framework Elements

Basic

**Accuracy:** Are the data field options sufficient to capture self-identified REaL responses?

**Completeness:** What is the % of blank, "unknown", "declined to answer", and prevalence of "other"?

**Consistency:** Does the data represent the population served when using census results\* ?

**Timeliness:** Are the data accuracy efforts routinely scheduled and compared to prior results?

**Corroboration:** Can the data be cross-checked to drivers license records or birth/death certificates?

Advanced

**Stability:** Are there differences in reporting for the same patient across multiple encounters & sites??



# MHA SUPPORTS RECOMMENDATION TO USE RACE DATA IN HSCRC POLICIES

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- Isolated REaL data issues were identified prior to 2012 and again 2014-2016. HSCRC, MHA and the field responded and **since 2017, all REaL data fields have been >99% complete.**
- **Race and ethnicity** have been further validated by KPMG to be **consistent with the most recent census**
- HSCRC, CRISP, MHA and the hospital field have focused efforts on **race, significantly improving the accuracy over the last 10 years**
- **MHA supports HSCRC's recommendation** that the **race data**, particularly the categories of black and white, are **mature and stable enough for use in policies**

# ACCURACY COULD BE IMPROVED WITH ALIGNMENT TO INDUSTRY BEST PRACTICES

## Recommendations

### Ethnicity

Ethnicity definitions have not been updated since 2014. OMB standards, for example, have updated "Hispanic" to "Hispanic or Latino". There is much debate on how to best allow self-identification for Latinx.

### Preferred Language

The question on "Preferred Language" only asks to declare the language name. As per OMB standards, Preferred language could include options related to proficiency.

### Other Preferred Language

If Other Preferred Language is not specified, it should be flagged as 'No other Preferred Language' rather than keeping it 'Blank;'. This will ensure the completeness of data.

## Current HSCRC Casemix Data Definitions

Ethnicity of the Patient	Enter whether the patient-defined ethnicity is Hispanic using the following coding. Hispanic is defined as a person of Cuban, Mexican, Puerto Rican, South or Central American, or other Spanish culture or lineage, regardless of race. The term, "Spanish origin," can be used in addition to "Hispanic or Latino."
	1 = SPANISH/HISPANIC ORIGIN
	2 = NOT SPANISH HISPANIC ORIGIN
	7 = DECLINED TO ANSWER
	9 = UNKNOWN
Preferred Language	Enter the patient's preferred spoken language for a health-related encounter from the list of codes below. If the patient's language is not listed below, code "Other", then report their language in Data Item #21, Other Preferred Language.
	<b>XX = PREFERRED LANGUAGE CODE(SEE "Preferred Lang Codes" TAB FOR CODES)</b>
Other Preferred Language	Enter the patient's <b>other</b> preferred spoken language for a health-related encounter if not listed among the Preferred Language Codes below.
	XXXXXXXXXXXXXXXXXXXXXXXXXXXX = OTHER PREFERRED LANGAUAGE
	BLANKS = NOT APPLICABLE



# PROPOSED RECOMMENDATIONS FOR HSCRC

- 1. Adopt an accuracy assessment framework** for validation based on research and current best practices and **use it to routinely assess REaL data**
- 2. Increase accuracy focus beyond race to include ethnicity** and then expand again to include **language and country of origin**
- 3. Regularly review HSCRC REaL data fields to better align with best practices** (ex. ethnicity)
- 4. Adopt a formal validation cadence and stratify by REaL data categories in scheduled reporting** to improve timeliness
- 5. Continue to explore and deploy best practice training and communication techniques for employee intake to increase accuracy**
- 6. Expand corroboration** by linking to additional reliable and trusted data sources **leveraging CRISP and MDH**. Go deeper on race and **expand to include ethnicity**
- 7. Advance validation techniques by adding a seventh element of probabilistic matching.** Research indicates that a technique of indirect estimation of rate and ethnicity could be used to enhance that algorithm for validation purposes. CRISP HIE is well positioned to advance the field into probabilistic matching.

# APPENDIX



# Real Data Accuracy Assessment Results

## Framework Elements

## Results of Assessment

### In Scope

**Accuracy:** Are the data definitions sufficient to capture self-identified REaL responses? Are patients allowed to self-identify?

**Completeness:** What is the percentage of empty (null/missing), indiscriminate (unknown or declined to answer), and prevalence of "other" responses?

**Consistency:** Does the data represent the population served?

- REaL data definitions are standardized by the HSCRC but ethnicity and preferred language could be better aligned to OMB and best practice standards.
- All hospitals rely on patient self-identification for REaL data. Many acknowledged opportunities for intake training.
- Hospitals use several techniques to validate including patient audits

• KPMG/MHA Analysis: All REaL data fields are > 99.7% complete.

• KPMG/MHA Analysis: Race and ethnicity are consistent relative to the most recent census.

### Next Steps

**Timeliness:** Are the data validation efforts routinely scheduled and compared to prior results?

**Corroboration:** Can the data be cross-checked across other data sets collecting REaL data?

**Stability:** Are there differences in reporting for the same patient across multiple encounters & sites??

• Quarterly completeness checks by HSCRC since 2017. Regular accuracy and consistency reviews have informally been done since 2012. Hospitals also routinely review their own data. A formal cadence is recommended and stratification by REaL data categories in scheduled reporting.

• In the last 2 years, successful Race cross-check by HSCRC and CRISP with Medicare CCLF and ADT data. Recommended to expand to additional trusted and reliable data sets.

• In the past year, HSCRC and CRISP have started to analyze race stability going back 5 years with initial findings that data is reliable.  
 • Recommended to broaden and deepen this work and include ethnicity

# TIMELINE OF EFFORTS TO IMPROVE CASEMIX REAL DATA (1/3)

## Response to “Act”

(2010-2014)

- HSCRC-**First accuracy** analysis and decoupled **race & ethnicity** data definitions per Federal guidance. At this time, only **race & ethnicity** REaL data elements were being collected.
- **Race & ethnicity** data issue with one health system reporting 90% unknown
- Maryland Legislature requests that HSCRC assess REaL data and make recommendations to improve data validity in the Maryland Health Improvement and Disparities Reduction Act of 2012
- HSCRC-**First completeness** assessment of **race & ethnicity** data for “unknown” values. The HSCRC determined that certain hospitals were under-reporting many of the **Ethnic** groups, much was being coded as unknown (11%). No issues noted with **race** (0.32%)
- HSCRC initiated REAL data collection training & awareness to increase **accuracy** and **completeness**.
- HSCRC completed a formal report to the Governor with recommendations on how to improve REaL **accuracy** and **completeness**
- HSCRC-Implemented **accuracy** improvements to further align **race** definitions with OMB guidance, including revisions to naming, additional categories, and changing “bi-racial” to “two or more races”
- HSCRC-Continued to improve **accuracy** with separations of race categories to allow for more than 1 **race** selection, **added Country of Birth, and free-text Preferred Language field**
- HSCRC did pre and post **accuracy** and **completeness** reviews to see what hospital staff learned from training and documented improvement



# TIMELINE OF EFFORTS TO IMPROVE CASEMIX REAL DATA (2/3)

## Refinement (2015 – 2019)

- **Race completeness** deteriorated in response to changes in reporting categories meant to improve **accuracy**. **Race** “Unknown” and “Declined to Answer” spiked from 0% to approx. 10%
- In response to this, HSCRC added a **race completeness** data edit check added for “Unknown”. This also established the first formal **timeliness** check.
- HSCRC recommended alignment of hospital registration questions with OMB standards focused on how to ask **race** and **ethnicity** to improve **accuracy** and **completeness**
- MHA formed Health Equity Task Force and addressed REaL validity issues: 1) Assisted field to address **completeness** issues with **race** “Unknown” and “Declined to Answer” 2) **First consistency** analysis of **race** using service area census. 3) Started field conversation on how to capture patient self-identification of REaL to improve **accuracy**
- 100% of Hospitals signed AHA’s Equity Pledge which included goals for REaL data validity through improved **accuracy, completeness** and **timeliness**
- **Race** “Unknown” and “Declined to Answer” response **completeness** normalized due to fieldwide targeted efforts
- HSCRC converted the free-text **preferred Language** to 26 defined options and **added other preferred language** field to improve **accuracy**
- Additional **race completeness** and **accuracy** analysis is performed by HSCRC staff to determine whether the data can be used for policy purposes
- HSCRC **consistency** analysis of **black race** using AHRQ validation approach comparing discharges to census distribution

# TIMELINE OF EFFORTS TO IMPROVE CASEMIX REAL DATA (3/3)

Current  
(2020- 2/2021)

- HSCRC made **first corroboration attempt** to cross-checking birth and mortality records to case-mix data but data sharing authorization barriers still exist.
- HSCRC successfully **completed first corroboration** analysis of **black vs. white race** using Medicare CCLF data and concluded that **case mix data is very complete for black vs. white race**.
- Through additional census **consistency** analysis, HSCRC flags a health system for misalignment of primary-service-area (PSA) vs. census. Upon deeper review the health system's data was vindicated due to patient preference for clinical pathways causing the health system's census to be misaligned with it's PSA.
- 100% of Hospitals sign MHA's Commitment to Racial Equity which includes goals for **accuracy, completeness, consistency, timeliness, corroboration and stability**.
- HSCRC further re-assessed **consistency, completeness** and **accuracy** of **race** field for application in the Readmissions policy recommending the **race** field is sufficiently valid to support policy stratification.
- 100% of Hospitals sign MHA's Commitment to Racial Equity which includes goals for **accuracy, completeness, consistency, timeliness, corroboration** and **stability**.
- To support COVID testing **race & ethnicity** stratification efforts, CRISP completed a **corroboration** analysis looking at 7 years of data (2013-2020) linking Admission-Discharge-Transfer data to Case-Mix with a **success rate of matching > 80% for race**. **Ethnicity** matches were not as conclusive.
- CRISP developed a **probabilistic** algorithm to predict a patient's race based on prior encounters to assign a race to COVID testing data
- HSCRC engaged H-Metrix to analyze **stability** across visits of the same patient at different locations over time in order to assign a **probabilistic** "final **race**". So far, the initial analysis supports that REaL data has been valid for the last 5 years, but further refinement of the **ethnicity** data definitions could improve ethnicity **accuracy**
- HSCRC recommends stratification of **race** in select quality policies which would establish **timeliness** cadence.

# HOSPITAL REAL DATA ACCURACY ASSESSMENT ACTIVITIES PER SURVEY OF FIELD

- Random audit of patients
- HSCRC casemix data edits
- Claritas Census data tool
- IBM Watson market share tool
- Scripted Q&A, training and improved communication tools
- Patient review and edit of their own REAL data in EMR
- Direct observation and ongoing performance audits for intake employees

# REFERENCES



# RESEARCH REFERENCES (1/2)

Agency	Year	Report Name	Description of Report
<u>Institute for Diversity &amp; Health Equity (IFDHE)- an affiliate of AHA</u>	2020	<u>REAL Data resource by Institute for Diversity &amp; Health Equity</u>	<ul style="list-style-type: none"> <li>• Overview and general understanding of REAL data</li> </ul>
	2019	<u>Northwell Health EOC Case Study- 2019</u>	<ul style="list-style-type: none"> <li>• Case study on improving the accuracy of REAL data</li> </ul>
<u>Hospitals in Pursuit of Excellence (HPOE)- an affiliate of AHA</u>	2015	<u>Equity of Care: A Toolkit for Eliminating Health Care Disparities</u>	<ul style="list-style-type: none"> <li>• Leading practices and key strategies for collection of REAL data</li> <li>• Four-Step Approach to Ensure Successful REAL Data Collection</li> <li>• Select case studies on implementation off data collection strategies &amp; improvement through multicultural task force</li> </ul>
	2014	<u>A framework for stratifying race, ethnicity and language data</u>	<ul style="list-style-type: none"> <li>• Parameters for validation of REAL data</li> </ul>
<u>National Committee for Quality Assurance (NCQA)</u>	2010	<u>Implementing Multicultural Health Care Standards: Ideas &amp; Examples</u>	<ul style="list-style-type: none"> <li>• Ideas &amp; examples for implementing multi-cultural healthcare standard for collection of REAL data</li> </ul>
<u>Healthcare Cost &amp; Utilization Project (H-CUP) – Affiliated to AHRQ</u>	2014	<u>HCUP Race and Ethnicity Data Improvement Toolkit</u>	<ul style="list-style-type: none"> <li>• Key themes identified for improvement in REAL data collection:                             <ul style="list-style-type: none"> <li>• Ensuring Adequate IT Infrastructure</li> <li>• Training Frontline Data Collectors</li> </ul> </li> <li>• Additional training materials</li> </ul>
	2012	<u>Measures to Access the Quality of REAL data reporting</u>	<ul style="list-style-type: none"> <li>• Standard methods of REAL data quality measurement</li> </ul>
<u>Official Journal of the Medical Care Section, American Public Health Association</u>	2019	<u>Validation of Race and Ethnicity data</u>	<ul style="list-style-type: none"> <li>• Best practices for data validation- identify and agree on a Gold Standard data source</li> </ul>
<u>AHRQ</u>	2009	<u>Race, Ethnicity, and Language Data: Standardization for Health Care Quality Improvement</u>	<ul style="list-style-type: none"> <li>• Report on indirect estimation in data collection</li> </ul>

# RESEARCH REFERENCES (2/2)

Agency	Year	Report Name	Description of Report
<u>AHRQ</u>	2009	<u>Race, Ethnicity, and Language Data: Standardization for Health Care Quality Improvement</u>	<ul style="list-style-type: none"> <li>• A snapshot of REAL data flow in a complex healthcare system</li> </ul>
<u>Office of Management and Budget</u>	1997	<u>Classification of Federal Data on Race and Ethnicity</u>	<ul style="list-style-type: none"> <li>• Classification of federal data based on race and ethnicity</li> <li>• Comparison of Maryland REAL data survey with Federal standards</li> </ul>
<u>THE AMERICAN JOURNAL OF MANAGED CARE</u>	2012	<u>Exploring Health Plan Perspectives in Collecting and Using Data on Race, Ethnicity, and Language</u>	<ul style="list-style-type: none"> <li>• Validation of REAL data through peer evaluation</li> </ul>
<u>Robert Wood Johnson Foundation   2008</u>	2008	<u>Collecting Data on Patient Race, Ethnicity and Primary Language to Help Hospitals Improve Quality of Care</u>	<ul style="list-style-type: none"> <li>• Validation of REAL data through peer evaluation</li> </ul>
<u>National Center for Biotechnology Information (NCBI) - National Library of Medicine</u>	2008	<u>A New Method for Estimating Race Ethnicity</u>	<ul style="list-style-type: none"> <li>• Report on indirect estimation in data collection</li> </ul>
<u>HSCRC</u>	2020	<u>Clinical data submission requirement</u>	<ul style="list-style-type: none"> <li>• Data elements in HSCRC Case-mix data</li> </ul>
<u>AHA</u>	2015	<u>AHA #123forequity Campaign</u>	<ul style="list-style-type: none"> <li>• #123forEquity Pledge to Act to Eliminate Health Care Disparities</li> </ul>
<u>Office of Minority Health</u>	2016	<u>State and Territorial Efforts to Reduce Health Disparities</u>	<ul style="list-style-type: none"> <li>• Examples of efforts and initiatives taken by various states to reduce health disparity</li> </ul>
<u>National Conference of State Legislatures (NCSL)</u>	2014	<u>State Approaches to Reducing Health Disparities</u>	





# Next Meeting

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Notes and slides will be posted to the  
HSCRC website:

[https://hscrc.maryland.gov/Pages/hsp\\_info1.aspx](https://hscrc.maryland.gov/Pages/hsp_info1.aspx)

Next Meeting  
FY 2022 Q1  
September 10, 2021

# Appendix 1: Changes to Data Submission Requirements for FY 2022

# Removal of County Variable, New Logic for Assigning Residency

- Current Logic
  - Payer = 18 is international insurance
  - County 89 as Foreign.
  - Zip = 77777
- Hospitals code Border State or Other State Zip code with County as 89
- Zip code lookup table has
  - County 89 has Resident Status 'Border State' and 'Other State'
- Proposed Logic
  - Retire County entirely from DSR
  - Replace it with Zip code lookup table
    - [https://hscrc.maryland.gov/Documents/CaseMixData/completezip\\_202007.xlsx](https://hscrc.maryland.gov/Documents/CaseMixData/completezip_202007.xlsx)
    - Use Zip Code = 77777 for International residents
  - Update processing pipeline to use Zip code lookup table for Residential Status

# Country Code Lookup update

- Current Lookup
  - Manually Maintained
  - Some countries are not present
- Proposed Lookup
  - ISO 3166-1 Alpha-2
  - E.g., US, CA, MX
  - <https://www.iso.org/obp/ui/#home>
    - Select “Country codes”
    - Enter the country name
      - E.g., “Germany”
    - Click Search



# New Expected Payer Codes

- Combine
  - Blue Cross (04), HMO (12), Blue Cross National Capital Area (16), Blue Cross – Other State (17) with Commercial Insurance (05)
  - Title V (03) with Other Government Programs (06)
  - Donor (11) with Other (10)
- Add
  - Behavioral Health Plans (19)
- Anticipated source of payment for the major portion of the patient’s hospital expenses
  - For codes 05, 14, 15, 19 report the applicable health plan in the Primary Health Plan Payer data item
  - For all other codes, report "100" NOT APPLICABLE for the Expected Primary Health Plan Payer data item
  - For MD Medicaid (14), a Medicaid ID must be reported in Data Item
  - For Out-Of-State Medicaid, enter "06 - Other Government Programs" and code "7777777777" for the Medicaid ID in Data Item

## Code Description

- 01 MEDICARE FFS
- 02 MD MEDICAID FFS AND PENDING MD MEDICAID
- 03 ~~TITLE V DO NOT USE~~
- 04 ~~BLUE CROSS DO NOT USE~~
- 05 COMMERCIAL INSURANCE, ~~OTHER THAN BLUE CROSS~~  
HMO/POS/PPO/PPN/TPA
- 06 OTHER GOVERNMENT PROGRAMS - *Usage Notes: Report Out-of-State (non-MD) Medicaid, Tri-Care, Champs and Title under this category*
- 07 WORKMEN'S COMPENSATION
- 08 SELF PAY
- 09 CHARITY (PATIENT WAS NOT CHARGES FOR CARE)
- 10 OTHER (INCLUDES GRANT FUNDED, DONOR)
- 11 ~~DONOR DO NOT USE~~
- 12 ~~HMO DO NOT USE~~
- 13 DO NOT USE
- 14 MD MEDICAID ~~HMO~~ MCO
- 15 MEDICARE ~~HMO~~ ADVANTAGE
- 16 ~~BLUE CROSS NATIONAL CAPITAL AREA DO NOT USE~~
- 17 ~~BLUE CROSS OTHER STATE (NON-MD) DO NOT USE~~
- 18 INTERNATIONAL INSURANCE
- 19 BEHAVIORAL HEALTH PLAN (NEW)
- 77 NOT APPLICABLE
- 99 UNKNOWN



# New Health Plan Payer Codes

- Combine various health plan products into major plans
  - E.g., CareFirst of Maryland, CareFirst Group Hospitalization and Medical Services Inc., and CareFirst Blue Choice are merged into CareFirst BlueCross BlueShield
- Expected Payer to Plan code cross documented in the lookup

Code	Description
	<b>Other:</b>
98	HEALTH PLAN PAYERS <b>NOT SPECIFIED BELOW</b> <i>Usage Note: Report Qualified Dental Plans (QDPs), Pharmacy Benefit Managers (PBMs), and any new health plans that become effective during the FY)</i>
99	UNKNOWN
100	NOT APPLICABLE - DOES NOT REQUIRE HEALTH PLAN PAYER <i>Usage Note: Report this code for Expected Payer Codes in (01, 02, 06 - 10, 18, and 77)</i>
	<b>Commercial HMO/POS/PPO/PPN/TPA (Expected Payer Code = 05)</b>
101	AETNA HEALTHPLANS
102	CAREFIRST BLUECROSS BLUESHIELD
103	CIGNA
104	GENERIC TPA/COMMERCIAL PLANS
105	GENERIC COMMERCIAL EMPLOYEE HEALTH PLANS <i>Usage Note: Do not report Johns Hopkins, MedStar or University of MD Employee Health plans in this category. See codes below.</i>
106	HUMANA
107	KAISER PERMANENTE
108	UNITED HEALTHCARE
125	JOHNS HOPKINS EMPLOYEE HEALTH PLANS
126	UNIVERSITY OF MD EMPLOYEE HEALTH PLANS
127	MEDSTAR EMPLOYEE HEALTH PLANS
	<b>MD Medicaid MCO (Expected Payer Code = 14):</b>
101	AETNA <b>HEALTHPLANS</b>
107	KAISER PERMANENTE
108	UNITED HEALTHCARE
109	AMERIGROUP
110	JAI MEDICAL SYSTEMS
111	MARYLAND PHYSICIANS CARE <b>MCO</b>
112	MEDSTAR FAMILY CHOICE <b>MCO</b>
113	PRIORITY PARTNERS <b>MCO</b>
114	CAREFIRST BLUECROSS BLUE SHIELD COMMUNITY HEALTH PLAN MARYLAND (formerly UNIVERSITY OF MD HEALTH PARTNERS)
	<b>Medicare Advantage (Expected Payer Code = 15)</b>
101	AETNA HEALTHPLANS
103	CIGNA
107	KAISER PERMANENTE
108	UNITED HEALTHCARE
115	JOHNS HOPKINS ADVANTAGE MD
116	PROVIDER PARTNERS HEALTH PLAN (NEW)
117	CAREFIRST BLUECROSS BLUESHIELD MEDICARE ADVANTAGE .UNIVERSITY-OF-MD-HEALTH-ADVANTAGE
	<b>Behavioral Health (Expected Payer Code = 19):</b>
118	OPTUM MARYLAND (MD MEDICAID) (previously Beacon Health)
119	MAGELLAN CareFirst-BlueCross-BlueShield—Behavioral Health
120	CIGNA BEHAVIORAL HEALTH
121	COMPSYCH
122	MANAGE HEALTH NETWORK
123	<del>United</del> OPTUM BEHAVIORAL HEALTH
124	BEACON HEALTH OPTIONS

# Accident Hour

Currently this information is collected as 1 variable

- First 2 digits is the value code (45)
- Last 2 digits is the accident hour

34	Value Code for Accident Hour and Appropriate Code for Time	Enter the 2-digit value code for accident and the 2-digit code for indicating the hour of the accident.	ACCITIME
		XXXX = ACCIDENT CODE AND HOUR	
		BLANKS = NOT APPLICABLE	

For FY 2022,

- Update the definition of this field to collect the **Accident Hour alone**
- Two digits - valid values are:
  - 00, 01, 02 ... 23 for the 24 hours of the day starting with 00 for 12 AM ET
  - 99 for Unknown

# Accident Code

- Accident codes should be reported using the Occurrence Code in Record Type 3
  - Valid Occurrence Code values
    - <https://www.resdac.org/sites/resdac.umn.edu/files/Claim%20Related%20Occurrence%20Table.txt>
- If the value is invalid (special characters) this is a Warning
  - Changed to Warning on May 2, 2019

# Appendix 2: New Edits for FY 2022

# Chronic Major Service / Daily Service – IP only

- New Error Edits
  - Allow Daily Service = 09 or Major Service = 10 only for Hospitals with Chronic Beds
  - If **Daily Service** values is 09 (CHRONIC) and Hospital does not belong to the Chronic List
  - If **Major Service** values is 10 (CHRONIC) and Hospital does not belong to the Chronic List
- List of Hospitals with Chronic Beds
  - Johns Hopkins Bayview Medical Center
  - UMMC Midtown Campus
  - UM - Rehabilitation & Orthopaedic Institute
  - UM - Prince George's Hospital Center



# Rehab Major Service / Daily Service – IP only

- Current Cross Edit Error
  - If Nature of Admission is Rehab, then Major Service must also be rehab
- New Additional Error Edits
  - Allow Daily Service = 08 or Major Service = 08 only for Hospitals with Rehab Beds
  - If **Daily Service** values is 08 (REHAB) and Hospital does not belong to the Rehab List
  - If **Major Service** values is 08 (REHABILITATION) and Hospital does not belong to the Rehab List

# Review Rules for Rehab Major Service / Daily Service – IP only

## List of Hospitals with Rehab Beds

- Meritus Medical Center
- UP - Western MD
- Adventist HealthCare Rehabilitation
- Adventist Healthcare Rehabilitation Hospital @ White Oak
- UMM Prince George's Hospital Center
- UM Rehab & Orthopaedic Institute
- UM Shore Medical Center at Easton
- Mt. Washington Pediatric Hospital, Inc.
- Lifebridge Sinai Hospital
- Lifebridge Levindale Hebrew Geriatric Center & Hospital
- Johns Hopkins Hospital
- Johns Hopkins Bayview Medical Center
- MedStar Good Samaritan Hospital
- Encompass Health Rehabilitation Hospital of Salisbury

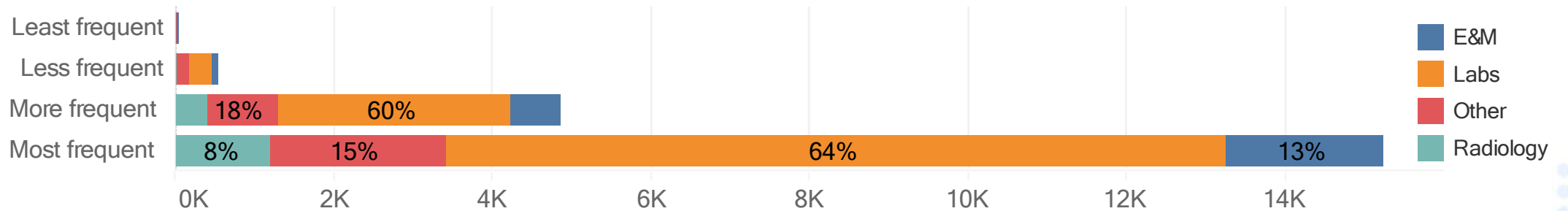


## Date of Service Validation Rule – OP (Error)

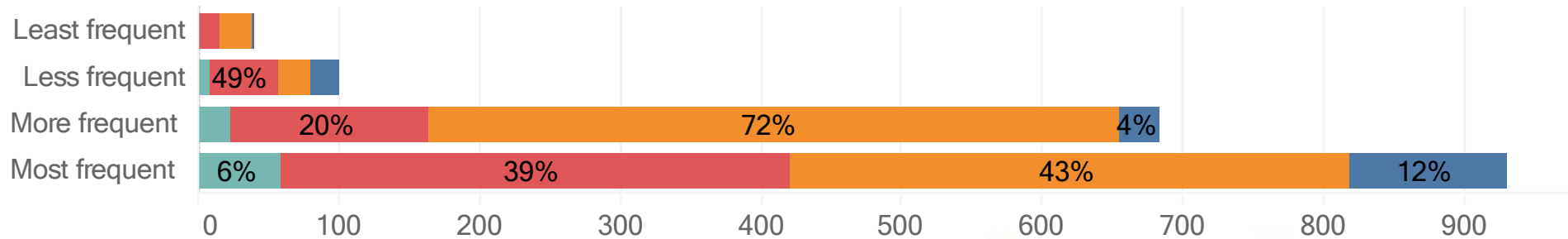
- **FY 2020 Edit Error:**
  - Error if Date of Service is more than 30 days before the service
  - Error if Date of Service is Past Thru Date
- **FY 2021 Edit Error:**
  - Error if Date of Service is:
    - more than 2 days before From Date or
    - more than 2 days after Thru Date
- **FY 2022 Edit Error:**
  - Error if Date of Service is outside From and Thru Date, unless associated CPT or HCPCS Code is COVID Testing (87635,U0001,U0002,U0003,U0004,U0005)
  - **(NEW) Error if Date of Service is +/- 5 days from Thru and From date and CPT or HCPCS Code is COVID Testing (87635,U0001,U0002,U0003,U0004,U0005)**
  - Impacts small number of records - less than .5%

# Service Outside From Date and Thru Date - Trends

- Hospitals grouped into one of four groups based on frequency
- Services coded before From Date



- Services coded after To Date

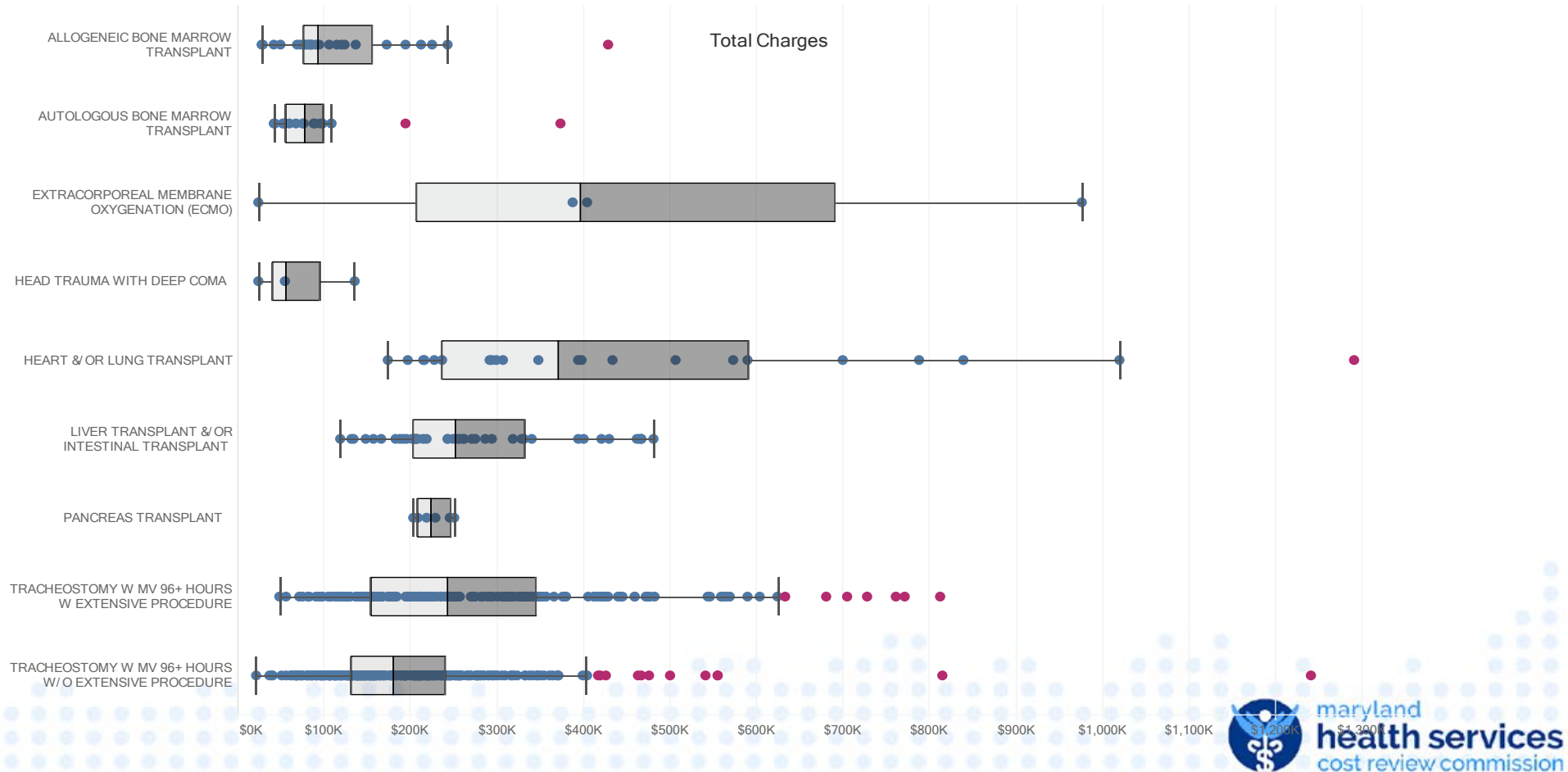


## Threshold for Charge Edit (Warning) – IP Only

- Thresholds are computed by APR DRG using the box and whisker method
- **First quartile** or 25<sup>th</sup> percentile is the median of the lower half of the dataset
- **Third quartile** or 75<sup>th</sup> percentile is the median of the upper half of the dataset
- **Interquartile range (IQR)** is the difference between the first and third quartile
- Two thresholds:
  - **High threshold** – third quartile *plus* 1.5 times IQR
  - **Low threshold** – first quartile *minus* 1.5 times IQR
- Data outside the range between the High and Low threshold are outliers

# Threshold for Charge Edit (Warning)

- Thresholds computed by APR DRG using box and whisker method
- Example below is for DRGs in MDC 0 (Transplants and Tracheostomy)



# Ambulance Run Number

- Pre-Hospital care data collection is regulated by MIEMSS (COMAR 30.03.04.04)
- Form known as Ambulance Runsheet (later “Maryland Ambulance Information System (MAIS))”
  - Electronic version named “Electronic MD Ambulance Information System (eMAIS)”
  - Switched to electronic system named “Electronic MD EMS Data System (eMEDS®)”
- eMEDS® collects an electronic Patient Care Report (ePCR)
  - Each report is assigned a unique number as they are generated
- Ambulance Run Number, now referred to as [e]PCR Number is unique to each individual report
- Starting January 1, 2021, this number changed:
  - from a 11-character string
  - to a 32-character string / Universally Unique Identifier (UUID or GUID)
    - [https://en.wikipedia.org/wiki/Universally\\_unique\\_identifier](https://en.wikipedia.org/wiki/Universally_unique_identifier)
- FY 2021 – Warning if value is not 32 hexadecimal (0-9A-F) characters
  - “00000000000000000000000000000000” = “Patient did not arrive by Ambulance”
  - Otherwise, more than five consecutive 0’s in the 32-character string is invalid
- **FY 2022 – The warning converts to an Error**



# Appendix 3: New Timeline for FY 2022

# Monthly and Quarterly Submissions

- To reduce confusion, the HSCRC plans to start referring to
  - **Preliminary** submissions as **Monthly** submissions
    - For example:
      - January Monthly (contains January discharges)
      - February Monthly (contains January, and February discharges)
      - March Monthly (contains January, February, and March discharges)
    - **Final** submissions as **Quarterly** submissions
      - Quarterly submission will always contain three months of discharges
  - The last submission before the submission deadline will be considered as the final submission for that submission period



# FY22 DSR Implementation Timeline

- Test / Sandbox
  - Go Live on August 1, 2021
  - Discharges July 1, 2021, onwards
  - Employs FY22 lookup and rules
- Production
  - **FY21 rules until Sept 15, 2021**
    - FY21 Q4
    - FY22 Jul, Aug Monthly
  - **FY22 rules from Oct 1, 2021**
    - FY22 Q1 Quarterly
    - FY22 Sep Monthly