## 2022 NPCR MARYLAND SUCCESS STORY

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Monitoring, Accountability, and Workflow: Improving Cancer Registry Processes Using Power Bl

# National Program of Cancer Registries SUCCESSSTORY

#### **SUMMARY**

The Maryland Cancer Registry (MCR) utilized Microsoft Power BI to generate new, interactive reports that connect data from tables in multiple databases to give current, up-to-date information on the status of case processing. These HIPAA compliant reports can be shared widely and are easily tailored to meet the registry needs.

#### **CHALLENGE**

Central cancer registries receive data from multiple sources in various forms. Tracking and accounting for all case data is a tedious task that was previously done manually, using spreadsheets. Data processing requires the use of several software tools and databases, so tracking files can be a challenge. We identified a better way to track a file all the way through processing, from Web Plus to Prep Plus to CRS Plus.

#### **SOLUTION**

Utilizing Microsoft BI, the following reports were developed:

- The Facilities Report shows abstracts processed based on the diagnosis year and compares them to previous years to help track the progress towards completion. This report can be further filtered by facility type and status. The pending case report is useful for work assignments. (Table 1)
- The Facilities Quarterly Report compares quarterly submissions by facility and gives a visual display of their status compared to previous vears.

 The WebPlus Submission Status Report tracks all files that were uploaded to WebPlus. It is filterable by File Date, File Type, Bundle ID, Facility ID, Status, version, and import status. This report displays the count of all files uploaded to Web Plus, how many records were

all the expected abstracts from a given facility in a month.

imported into Prep Plus, and subsequently, CRS Plus. Any count differences are highlighted in red for easy review.
 The Web Plus Export Status Report tracks bundles that were exported from Web Plus and records counts for each database and highlights

any differences. This report also lists any missing case files in CRS Plus

The Monthly Facilities Report shows the counts of abstracts that were

received in the last six months, by facility. This report also includes the

same filters as the Facilities Report and a bar graph that visualizes the

number of abstracts received versus the average monthly count from

2021. This report is a good way to determine if the registry has received

 The HL7 & MU Submission Files Report tracks all HL7 and Meaningful Uses cases that were uploaded to the SFTP server and Web Plus. This is useful in creating monthly reports and for tracking if a given facility is behind in submitting files. Before generating this report, HL7 and Meaningful Use cases were counted manually at the end of each month.

### **RESULTS**

Power BI is a useful tool that has allowed the MCR to:

for review to ensure all cases are accounted for.

- Track facility submissions dynamically and better assess their status.
- Better manage resources by planning work assignments based on caseload
- Increase efficiency by eliminating labor-intensive manual tracking.
- Improve tracking and monitoring of the progression of files during processing.
- Quickly identify, review, and address any missed cases and/or files.
- Have greater accountability of all files submitted to the MCR.

#### **SUSTAINING SUCCESS**

We continue to improve the Power BI dashboard with new features and reports as needs arise. For example, the WebPlus Submission Status Report was recently updated to include filters for version and whether a file has already been reviewed using the Myriddian Quality Assessment Tool (MQAT). Recently, we added the top 10 primary site counts to the display to visualize the fluctuation and progress during the COVID-19 pandemic. This can be further filtered by type and facility. Another recently added feature is patient lookup, where staff can identify a group of patients based on selected criteria that can be used to do quality assurance reviews.

#### **STORY QUOTE**

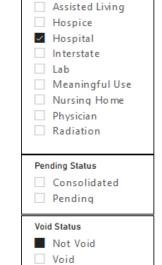
"The Power BI dashboard provides data monitoring and visualization at your fingertips" – Vijay Medithi, Program Director

#### REGISTRY CONTACT INFORMATION

410-344-2851 Maryland Cancer Registry

#### **TABLE 1. FACILITIES REPORT**

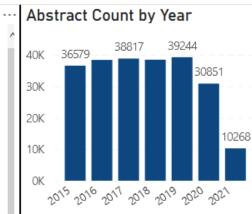






https://mq at.myriddian.com









Notes: Information based on abstracts diagnosed per year.

% of change in red denotes (more than 10% or 100 cases) decrease of abstracts in any year.

% of change in blue denotes a considerable (more than 10% or 100 cases) increase of abstracts in any year