NATIONAL PARAMETER STREAMENT



Improvements in Data Analytics to Develop, Define and Drive Program Goals

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Learning Objectives

- To show how data can be used to narrow and focus the scope of prevention and investigation activities
- Discuss how data can be used to support and improve the activities of care and prevention activities across a wide spectrum
- Describe ways Tableau is used to visualize large sets of data, and to explain functionality and opportunities to use the dashboard to synthesis and report high quality data to stakeholders



Tableau

- Tableau is a visual analytics tool that leverages the visualization process to better understand data
- Desktop user can create an interactive and shareable dashboards
- A dashboard depict the trends, variations, and density of the data in the form of graphs and charts





Tableau for District of Columbia EMA Ryan White Program

- Performance measure data is used to display strengths and identify areas for improvement in order to guide, shape and enhance the quality of care in the District of Columbia Eligible Metropolitan Area (EMA) Ryan White Program
- The goal is to minimize wide fluctuations in care and maintain a consistent level of service in the EMA

 Data visualization enables program staff to see data analytics presented visually to identify new patterns and better inform programmatic efforts



Functionality of Tableau for District of Columbia EMA Ryan White Program

- In creating interactive visualizations, the concept is taken a step further by using dashboards to drill down into charts and graphs in order to find nuanced patterns in granular data
- Tableau also enables interactivity by allowing users to manually input values (such as a goal) to be used in calculations. These options empower non-analyst dashboard users, helping build a data-driven Ryan White program
- Tableau facilitates the use and blending of data from public sources in conjunction with our Ryan White data, enabling useful insight and providing normalized results for the population



Performance Measure Dashboard Creation Process

- Performance data was extracted from District of Columbia's CareWare, cleaned and linked as a data source to Tableau
- Analytics were done in Tableau to calculate aggregate sums of the core service performance measures
- Detailed measure descriptions including inclusion and exclusion criteria for the numerator and denominator can be found in the HIV/AIDS Bureau (HAB) performance measure portfolio on the HAB website

HIV/AIDS Bureau (HAB) Performance Measures

Gap in Medical Visit

Medical Visit Frequency

Oral Exam

PCP Prophylaxis

Syphilis Screening

Prescribed ARV Therapy

Viral Load Suppression



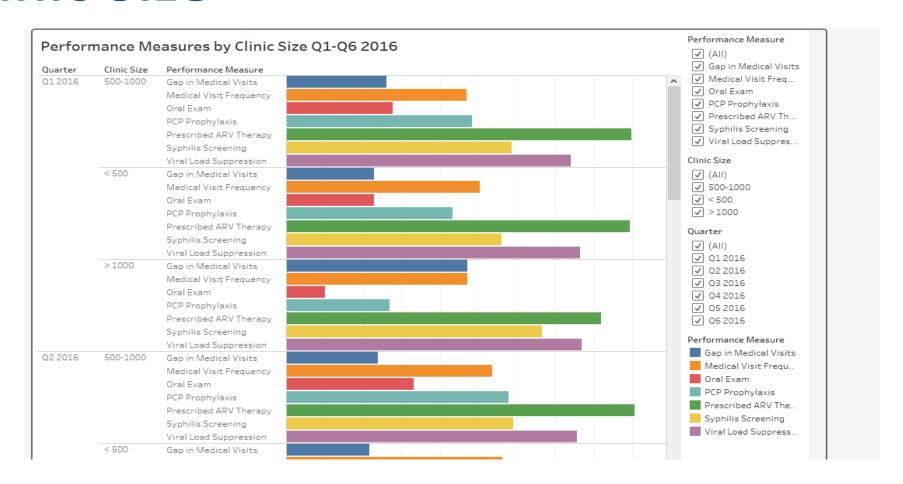
Performance Measure Dashboard Data Elements

- 27 providers in the EMA included:
 - 1 in West Virginia
 - 5 in Virginia
 - 5 in Maryland
 - 16 in District of Columbia
- Clinic size is determined by the number of RW clients served in a grant year:
 - Less than 500
 - 500-1000
 - More than 1000

Quarter	Date Range
1	Mar 2016 – May 2016
2	June 2016 –Aug 2016
3	Sept 2016 – Nov 2016
4	Dec 2016 – Feb 2017
5	Mar 2017- May 2017
6	June 2017-August 2017

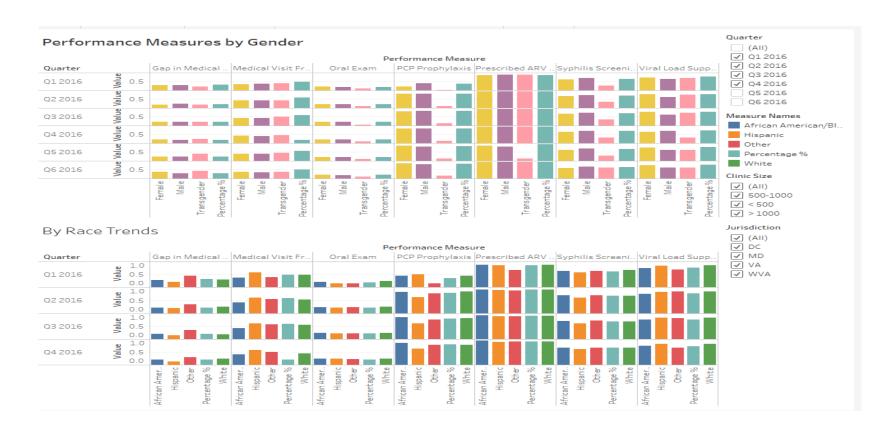


Performance Measure Dashboard by Clinic Size



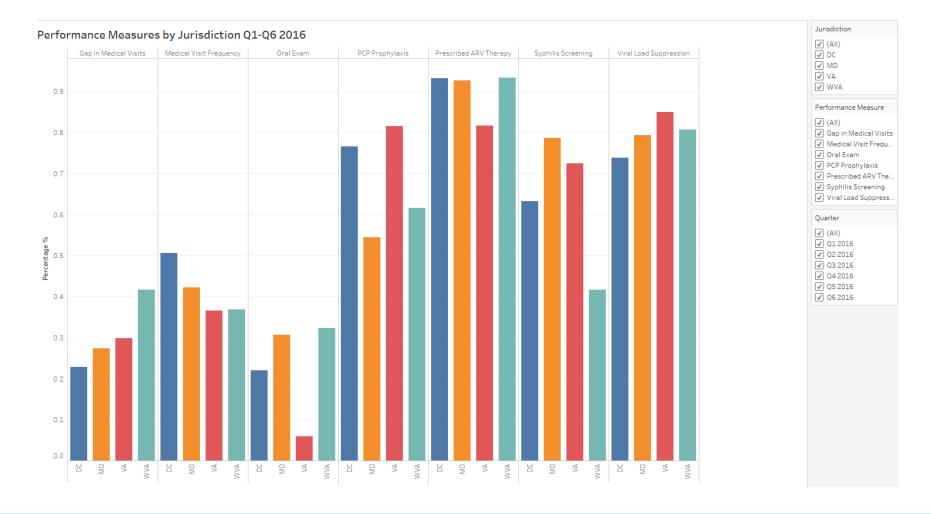


Performance Measure Dashboard by Gender and Race





Performance Measure Dashboard by Jurisdiction





Conclusion

- Tableau is currently used in our DC EMA Ryan White program for internal purposes to better inform quality management and program staff on changes to our data and associated outcomes
- Moving way from tabulated data in spreadsheets to a robust interactive dataset allows Data Managers and Analysts to do more with the data available in less time

