

INTEGRATING TECHNOLOGY AND DATA

The use of the Prevention Data Dashboard in the District of Columbia

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Introduction

Partnership for Success Grant

SAMHSA grant awarded to District of Columbia (DC) Department of Behavior Health (DBH): 2015-2019



- A follow-up to the SPF-SIG grant where much of the data infrastructure for this grant began
- Primarily focused on the prevention of underage drinking and youth marijuana focus on quantifiable declines in use
- RTI International contracted to conduct the evaluation and lead the epidemiological outcomes workgroup (DCEOW).

Primary Goals of the DCEOW

Identify, organize, analyze and share key substance abuse prevention and related behavioral health indicators data

Create data-guided products that can inform prevention planning/policies

Train communities in understanding, using and presenting data in an effective manner

Build state and local level monitoring and surveillance systems

Previous Methods for Using DCEOW Data

- One of the main uses have been to generate community reports that can be used by our client (DBH), its community partners, and general District residents.
- Over the life of these grants, we developed a series of DCEOW products.
- These products have evolved based on the needs of District and improved capacity of the DCEOW team.

Continued Issues

Managing and reporting large amount of epi data collected

Difficult to ensure new products are disseminated to broad audiences

Integrate use of technology

Developing the DCEOW Data Dashboard

Basics: What is a data dashboard and why is it important?

- Visual display of data
- Convenience
- Increased accessibility to data
- Interactive to make customized data
- Limitations:
 - Less text—keep simple or expect users with strong data interpretation skills
 - High upfront cost, routine maintenance and updates
 - Important to standardize layout and data elements as much as possible



Dashboard as a tool for highlighting other agency work/tasks

Can use the dashboard to showcase initiatives or projects that the organization is already working on



Good opportunity to highlight work of others at the agency that is not necessarily directly related to the dashboard to garner more support for the tool



May attract a wider audience to the dashboard and draw unexpected users



Building a Data Dashboard

Identify **NEED**



DESIGN



BUILD



UPDATE AND MAINTAIN



- Clear understanding of the purpose and intended use
- Identify and engage the decision-makers

- Determine and identify available data sources
- Develop overarching organizational structure
- Design platform and layout with programming team

- Collect and compile data
- Build dashboard pages
- Rebuild dashboard pages
- Develop clear and concise introductory and explanatory text
- Publish dashboard

- Add new years of data for existing data sources
- Add new data sources
- Continued development and innovation (new features etc.)

Explore the DCEOW Data Dashboard

Data Available on Data Dashboard



- **Publicly available data sources**

- National Survey on Drug Use and Health (NSDUH)
- CDC Youth Risk Behavior Survey (YRBS)
- Local Alcohol Beverage Regulation Administration
- Local Public School System

- **Data obtained through special requests or partnering members**

- Police Department Data
- National Poisoning Data System
- Child and Family Services Agency
- Alcohol Beverage Regulation Administration

- **Agency/organization generated data**

- Department of Behavioral Health Treatment Data
- Adult and Youth District of Columbia Prevention Survey



Youth Risk Behavior Survey



The DCEOW Collects and Organized Data Using Two Frameworks

1) A framework of exploring substance-related consumption, consequences, and risk/protective factors

- Primarily alcohol and marijuana
- Other substances (e.g., illicit drugs, non-medical use of prescription medication)

2) Social Ecological Model, which explores the different contexts in which substance-related factors exists:

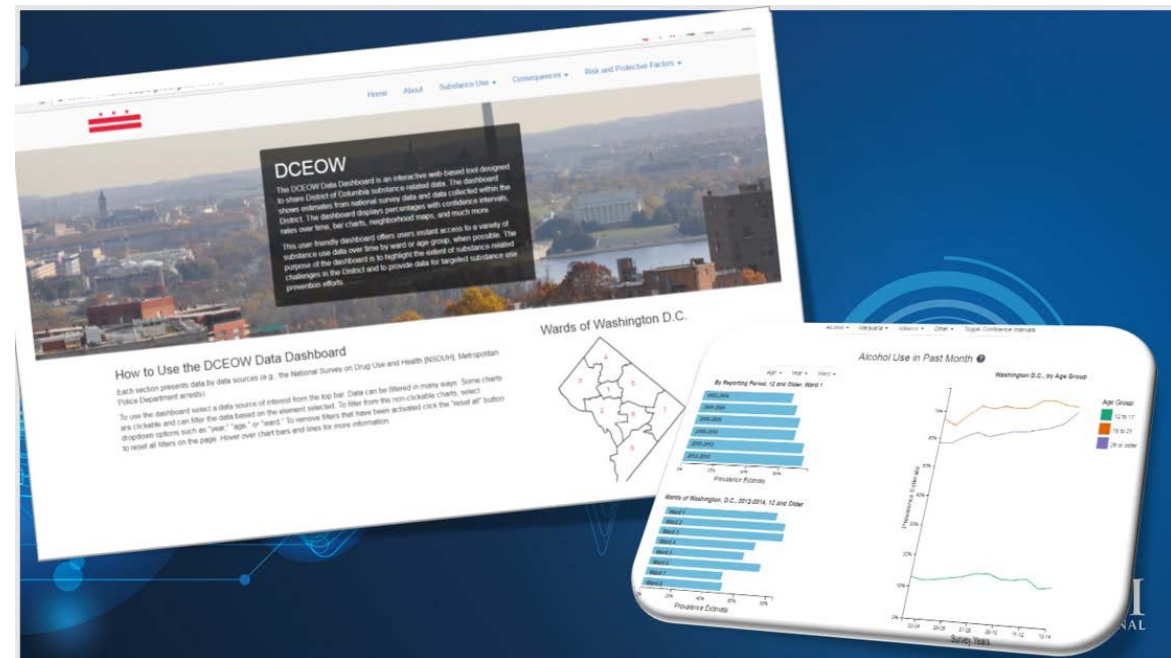
- Individual-level
- Peer-level
- Parent-level
- Community-level
- Societal-level



DCEOW Data Dashboard

The purpose of the dashboard is to highlight the extent of substance-related challenges in the District and to provide data for targeted substance use prevention efforts.

- ❖ Instant access to a variety of substance use data
- ❖ Organized by time, ward, and age group, when possible.



Link to the Dashboard

<https://dcspfsig.rti.org/dashboard/>

Future Steps and Closing

Benefits of Building and Presenting Data through a Data Dashboard

- Primary: increased data accessibility for a broader more diverse audience
- Makes complex data...
 - Visually appealing
 - Easy to interpret
- Illustrates disparities in the community (and across communities)
- Convenient compilation of data
- Reduces burden of searching through large, detailed epidemiological reports for a single piece of data
- Inviting and intuitive
- Encourages independent analysis and innovation



Challenges with Building a Dashboard

- Standardizing data presentation across data sources
- Satisfying varying needs and preferences across different users, including clients
- Limited availability of data for small geographical regions
- Estimate suppression and small cell sizes for survey data
- Continuous process of new and updated data becoming available
- Finding middle ground between vision and feasibility/execution
- Explaining data limitations without detracting from the inherent clean, simplistic feel of the dashboard



Strategies for Handling Data Challenges

- Seek out existing crosswalks to convert data organized by varying administrative boundaries (Census, local state or city GIS services/agencies)
- If not publicly available, work with the GIS specialists to develop custom crosswalks
- Map data points by geographical coordinates where possible
- Combine categories in order generate a larger cell size
- Work with programmers to...
 - generate data suppression rules
 - identify areas in your data with large amounts of missingness



Strategies to promote use of the dashboard



- Engage Epidemiological Outcomes Workgroup members at all parts of the dashboard creation process.
 - Solicit data/content for dashboard
 - Solicit feedback on current state of dashboard
 - Encourage members to share it widely with others in their organization



- Share and present tool to key stakeholders such as grantees and subrecipients
 - Present at meeting
 - Share link on existing resources page already in use
 - Garner support from organizational leadership to share tool with other decision makers



- Share tool with general public through:
 - Conferences
 - General organization website

Continued development and innovation



- Reconsider content and organization of existing pages and determine if any new/additional information can be added or reorganized
 - Be cognizant of changes to the survey questions or methodology that means years of data should no longer be compared → if still opting to present the data make sure it is clearly noted
- Consider feedback and suggested changes for improving the user experience (e.g. functionality, formatting)
- Consider adding new features
 - e.g. download/export capacity for graphs and tables; customizable templates for including specific user-selected pieces of information



Goals for the DC Data Dashboard

- Get data in the hands of those that need it - individuals, groups, organizations, prevention centers, and policymakers
- Provide a convenient “one stop shop” setup for all DC substance abuse prevention related data
- Reduce the need and burden of continually developing large static annual reports so that resources can be diverted elsewhere
- Inspire continued development and innovation in both the District and the general field of prevention



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- DC Department of Behavioral Health
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Questions?



Check out the DCEOW Dashboard yourself:
<https://dcspfsig.rti.org/dashboard/>

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