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# SPARS Visualizations Demo

FedCASIC 2018

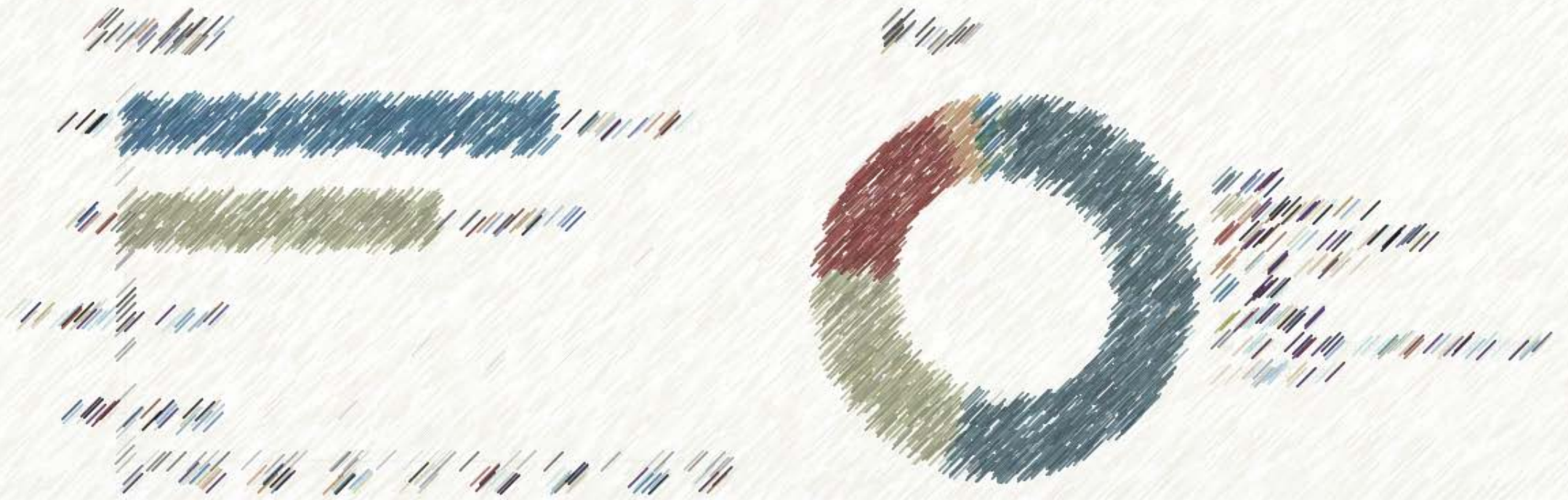
Presenter: Chris Griggs

Author: Roger Jesrani

Contributors: Bharathi Jayanthi Golla

Jorgen Waldermo

Rebecca Watkins





- SPARS
- Team
- UX themes
- Programming Stack
- Demo

## SAMHSA

Substance Abuse and Mental Health Services Administration

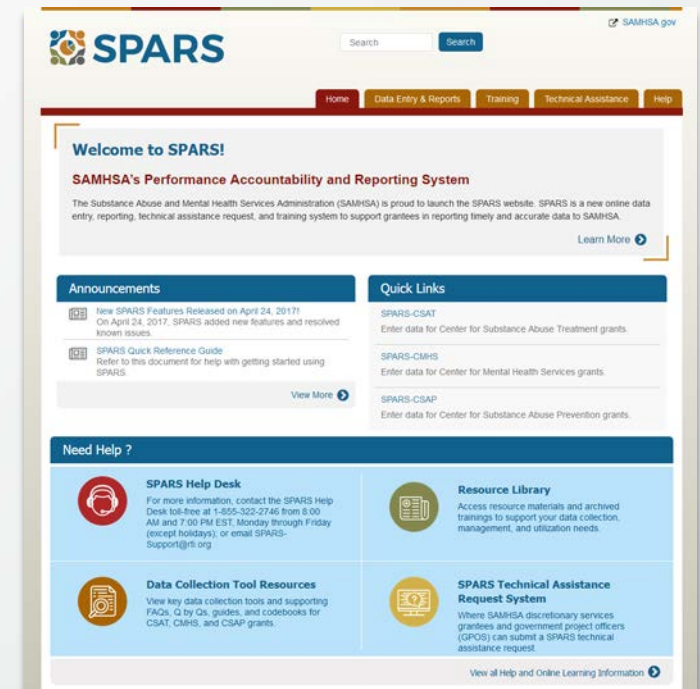


## CSAT

Center for Substance Abuse Treatment promotes community-based substance abuse treatment and recovery services for individuals and families

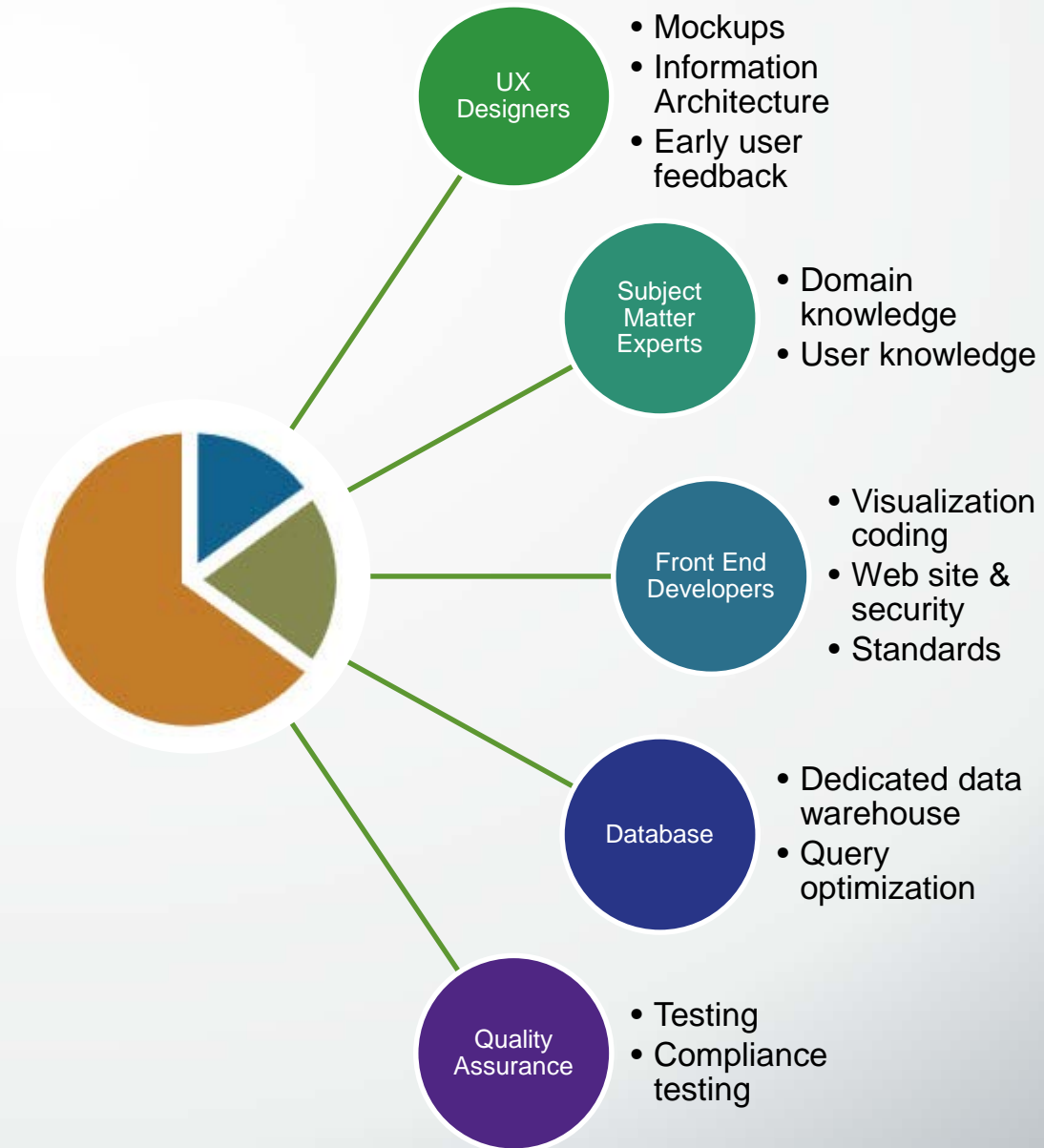
## SPARS

- SPARS is a new online data entry, reporting, technical assistance and training system to support grantees in reporting timely and accurate data
- SPARS replaces systems used by these centers:
  - CSAT – Center for Substance Abuse Treatment (SAIS)
  - CMHS – Center for Mental Health Services (TRAC)
  - CSAP – Center for Substance Abuse Prevention (PMRTS)



# Visualization Team

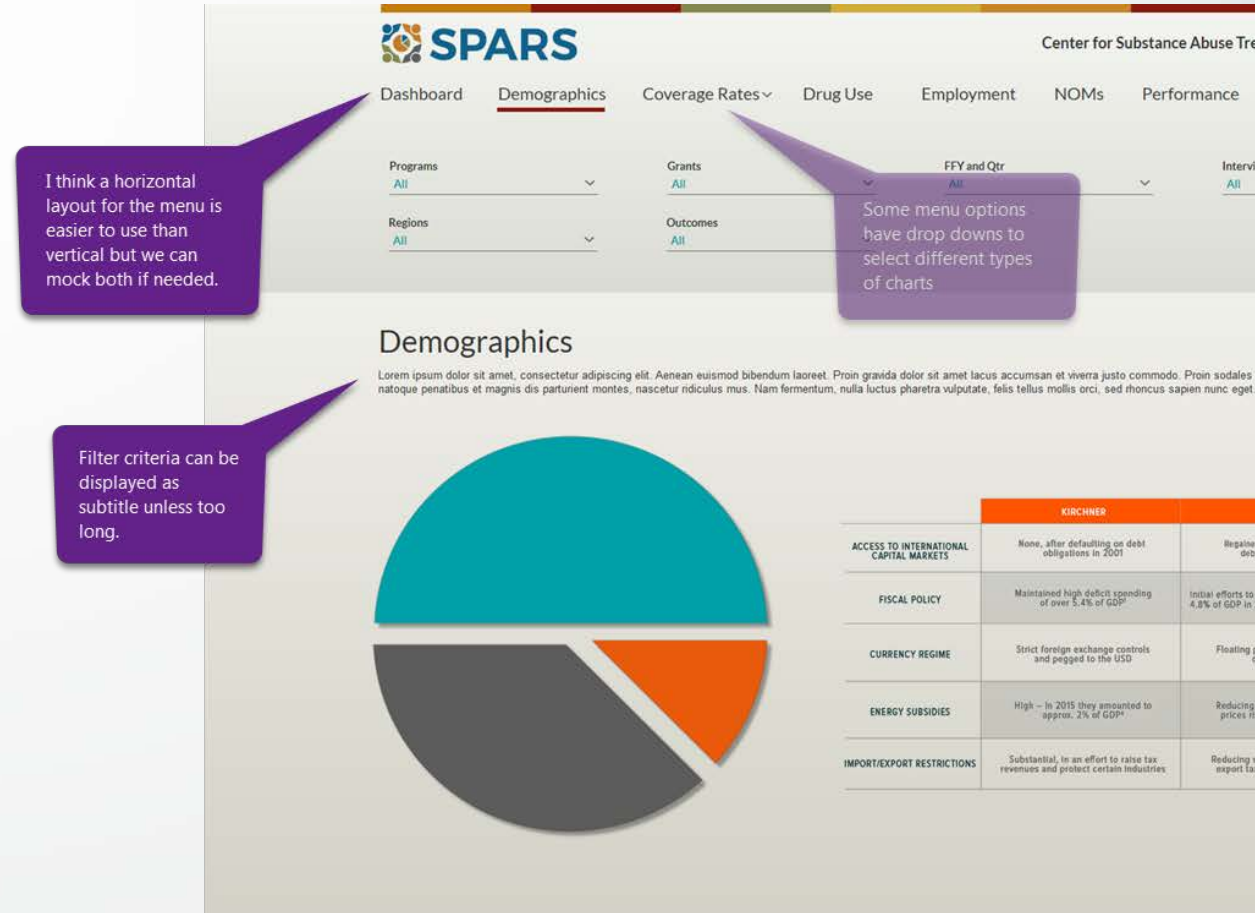
- Multidisciplinary team
- Agile like development
- Regular client demos during development
- Iterative QA testing



Immediacy

Information vs Data

Encourage Exploration



Early mockup

# User Experience - Immediacy

The goal of the design is to **reduce friction**; to makes the charts more usable (quicker, easier, approachable).

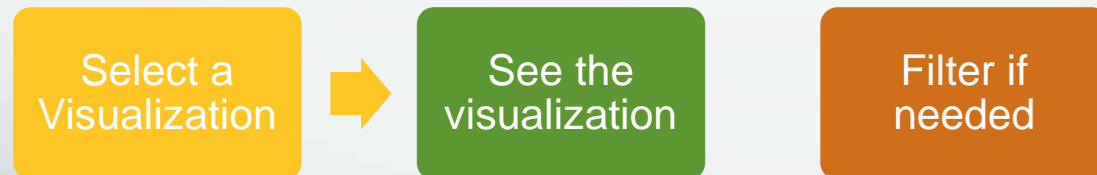
Friction is caused when the user has to pause, think, click, tab, type, consider, etc.



The reporting workflow tends to be **filter first, view second**:



The visualization workflow tends to be **view first, filter second**:







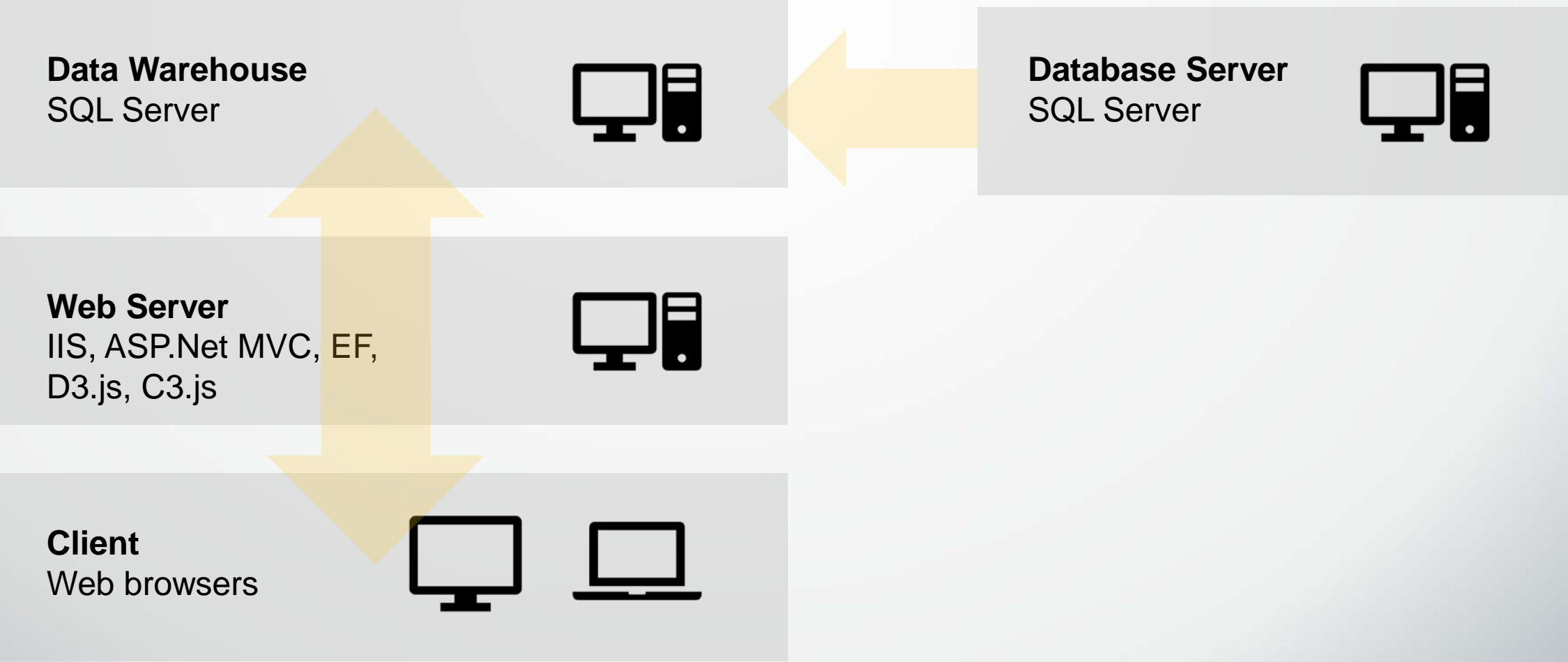
# User Experience – Encourage Exploration

## Encourage the user to interact

- Start with a chart
- Provide selection defaults
- Make refresh fast enough to encourage use
- Make easy to start over
- Provide selection examples

The screenshot displays a dashboard with several filter tabs: Demographics, Intake Coverage Rate, Follow-up Rate, and Outcome Change. Under Demographics, there are dropdown menus for 'GPO, Programs and Grants' (set to 'All'), 'Regions' (set to 'All'), 'Gender' (set to 'All'), 'Race and Ethnicity' (set to 'All'), 'Age' (set to 'All'), 'FFY and Quarter' (set to 'All'), 'Interview Types' (set to 'All Intakes (Matched and Un...)', and 'Outcomes' (set to 'All'). A 'Select regions' dialog box is open, showing a list of regions with checkboxes. The 'All' option is selected. The dialog box also features a map of the United States with numbered regions (1-10) and an 'OK' button. The background chart shows a bar for 'Other' at 0.0% (77).

# Visualization Programming Stack



**C3**

JS Charting Library

<http://c3js.org/>

**D3**

JS Charting Library

<https://d3js.org/>



The screenshot shows the SPARS website interface. At the top, there is a logo for SPARS and a search bar. Below the logo is a navigation menu with links for Home, Data Entry & Reports, Training, Technical Assistance, and Help. The main content area features a welcome message, a section for announcements, a quick links section, and a help section with four categories: SPARS Help Desk, Resource Library, Data Collection Tool Resources, and SPARS Technical Assistance Request System. A footer link for 'View all Help and Online Learning Information' is also present.

[SAMHSA.gov](#)

## SPARS

- Home
- Data Entry & Reports
- Training
- Technical Assistance
- Help

### Welcome to SPARS!

#### SAMHSA's Performance Accountability and Reporting System

The Substance Abuse and Mental Health Services Administration (SAMHSA) is proud to launch the SPARS website. SPARS is a new online data entry, reporting, technical assistance request, and training system to support grantees in reporting timely and accurate data to SAMHSA.

[Learn More](#)

#### Announcements

-  **New SPARS Features Released on April 24, 2017!**  
On April 24, 2017, SPARS added new features and resolved known issues.
-  **SPARS Quick Reference Guide**  
Refer to this document for help with getting started using SPARS.

[View More](#)

#### Quick Links

- SPARS-CSAT**  
Enter data for Center for Substance Abuse Treatment grants.
- SPARS-CMHS**  
Enter data for Center for Mental Health Services grants.
- SPARS-CSAP**  
Enter data for Center for Substance Abuse Prevention grants.

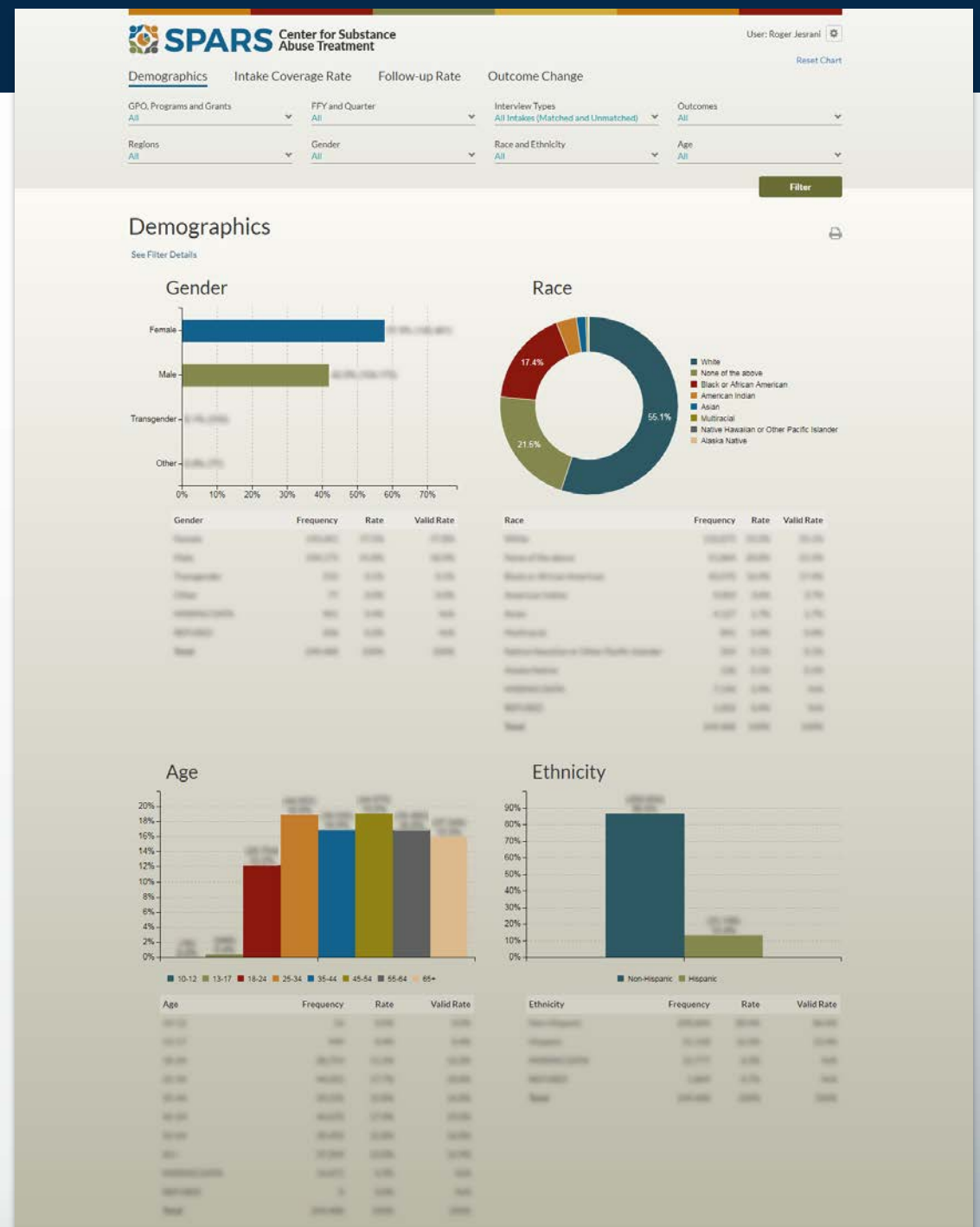
#### Need Help ?

 <h4>SPARS Help Desk</h4> <p>For more information, contact the SPARS Help Desk toll-free at 1-855-322-2746 from 8:00 AM and 7:00 PM EST, Monday through Friday (except holidays); or email SPARS-Support@rti.org</p>	 <h4>Resource Library</h4> <p>Access resource materials and archived trainings to support your data collection, management, and utilization needs.</p>
 <h4>Data Collection Tool Resources</h4> <p>View key data collection tools and supporting FAQs, Q by Qs, guides, and codebooks for CSAT, CMHS, and CSAP grants.</p>	 <h4>SPARS Technical Assistance Request System</h4> <p>Where SAMHSA discretionary services grantees and government project officers (GPOS) can submit a SPARS technical assistance request.</p>

[View all Help and Online Learning Information](#)

# Demographics Visualization

- The Demographics visualization provides descriptions of the populations being served through SAMHSA programs.
- Demographic information is collected during the initial client intake interview.
- Common UI elements across all visualizations
  - SPARS branding
  - Minimal chrome
  - Charts are the stars



# GPO, Program, Grant filter

The screenshot shows the SPARS Center for Substance Abuse Treatment web application. At the top, the logo and name are displayed. The user is identified as Roger Jesrani. The main navigation includes tabs for Demographics, Intake Coverage Rate, Follow-up Rate, and Outcome Change. The current view is set to 'Demographics' with filters for 'GPO, Programs and Grants' (All), 'FFY and Quarter' (All), 'Interview Types' (All Intakes (Matched and Unmatched)), and 'Outcomes' (All). A modal window titled 'Select GPO, programs and grants' is open, allowing selection between 'Programs' and 'Grants'. Under 'Programs', options include 'GPO', 'All Programs', and 'Selected Programs'. Two lists of items are shown for selection, each with a search bar and a list of items. An 'OK' button is at the bottom of the modal. On the right side of the modal, there is a 'Filter' button and a print icon. A legend for race categories is visible on the right side of the page.

User: Roger Jesrani

[Reset Chart](#)

Demographics Intake Coverage Rate Follow-up Rate Outcome Change

GPO, Programs and Grants **All** FFY and Quarter **All** Interview Types **All Intakes (Matched and Unmatched)** Outcomes **All**

Age **All**

**Filter**

**White**  
**None of the above**  
**Black or African American**  
**American Indian**  
**Asian**  
**Multiracial**  
**Native Hawaiian or Other Pacific Islander**  
**Alaska Native**

**Showing all 16** **Showing all 3**

Type to filter


Type to filter

**OK**

Gender Frequency Rate Valid Rate Race Frequency Rate Valid Rate

# Regions Filter

**SPARS** Center for Substance Abuse Treatment

User: Roger Jesrani 

[Reset Chart](#)

**Demographics** | Intake Coverage Rate | Follow-up Rate | Outcome Change

GPO, Programs and Grants: **All** | FFY and Quarter: **All** | Interview Types: **All Intakes (Matched and Unmatched)** | Outcomes: **All**

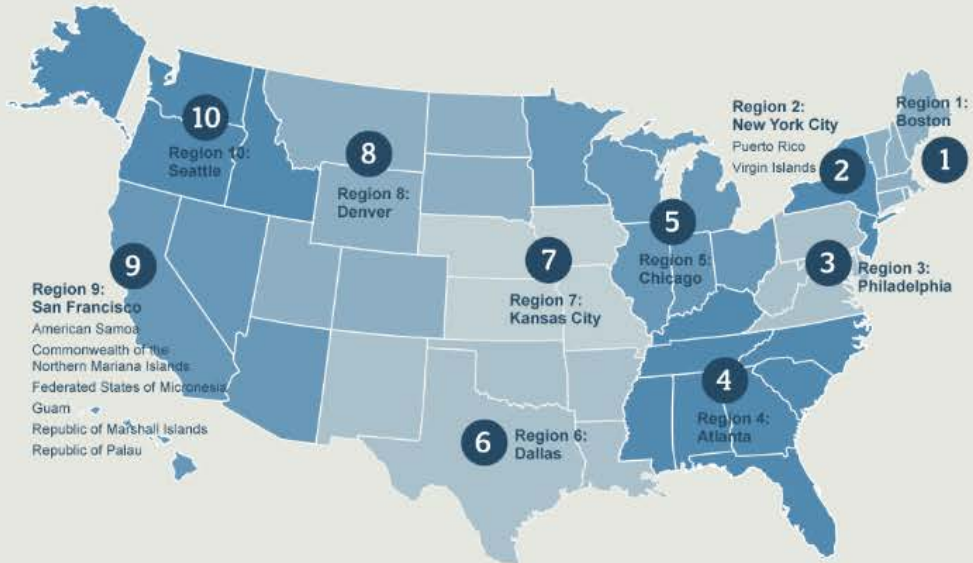
Regions: **All** | Gender: **All** | Race and Ethnicity: **All** | Age: **All**

Select regions

All


Selected

- Region 1
- Region 2
- Region 3
- Region 4
- Region 5
- Region 6
- Region 7
- Region 8
- Region 9
- Region 10



**OK**

**Filter**



American

Other Pacific Islander

Gender      Frequency      Rate      Valid Rate      Race      Frequency      Rate      Valid Rate

# Viewing filter details

[Reset Chart](#)

Demographics

Intake Coverage Rate

Follow-up Rate

Outcome Change

GPO, Programs and Grants  
[CABHI-States, CONTRACTS, EADCS...](#) ▼

FFY and Quarter  
[All, Q3](#) ▼

Interview Types  
[All Intakes \(Matched and Unmatched\)](#) ▼

Outcomes  
[All](#) ▼

Regions  
[Region 2, Region 3, Region 4, Region ...](#) ▼

Gender  
[Female, Male, Transgender](#) ▼

Race and Ethnicity  
[American Indian, Asian, Black or Afri...](#) ▼

Age  
[10-12, 18-24, 25-34, 35-44, 45-54](#) ▼

[Filter](#)

## Demographics

[Hide Filter Details](#)

GPO, Programs and Grants  
CABHI-States, CONTRACTS, EADCST,  
ORP, PDOA, RTIAUTOTESTGFA; All  
Grants

Regions  
Region 2, Region 3, Region 4, Region 6,  
Region 7, Region 9

FFY and Quarter  
FFY: All; Quarter: Q3

Gender  
Female, Male, Transgender

Interview Types  
All Intakes (Matched and Unmatched)

Race and Ethnicity  
American Indian, Asian, Black or African  
American; Hispanicity: Hispanic

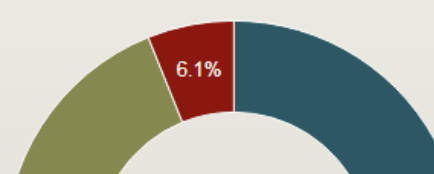
Outcomes  
All

Age  
10-12, 18-24, 25-34, 35-44, 45-54, 55-64

### Gender



### Race









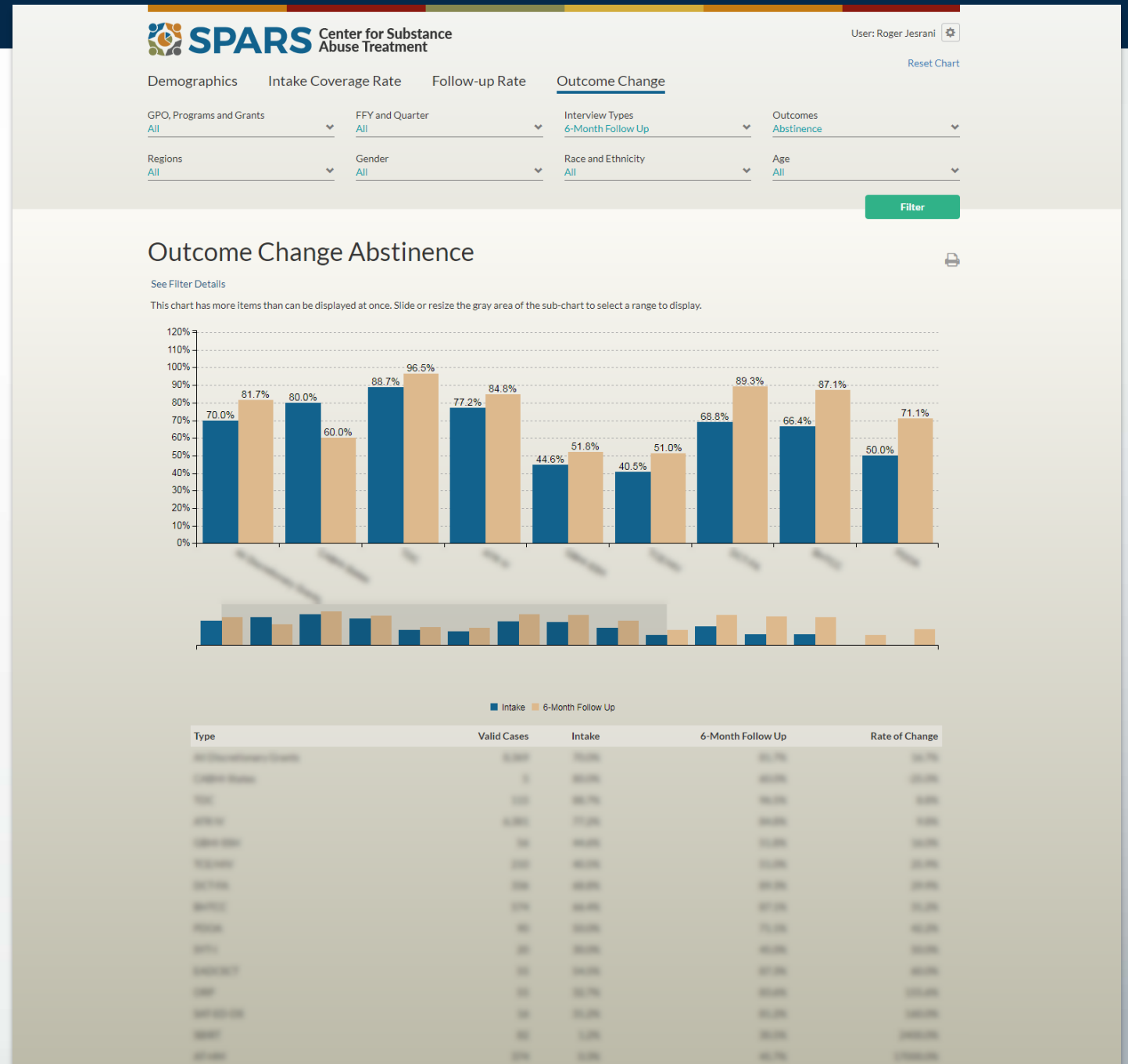
# Outcome Change

- Outcome Change shows which programs and grants are making a **positive change for their clients**
- Changes across 6 different measures

Select an outcome at intake

- Abstinence**  
Did not use alcohol or illegal drugs
- Crime and Criminal Justice**  
Has no past 30 day arrests
- Employment /Education**  
Were currently employed or attending school
- Health / Behavioral / Social Consequences**  
Experienced no alcohol or drug related health, behavioral, or social consequences
- Social Connectedness**  
Were socially connected
- Stability in Housing**  
Had a permanent place to live in the community

- Compares intake interview % to selected interview period and outcome







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