

# **Advancing SAMHSA Programs in Reaching Equity (ASPIRE) Dashboard: A Case Study in Improving the Usability of Demographic Data**



**HHS Office of the Assistant Secretary for Planning and Evaluation -  
Division of Evidence, Evaluation and Data Policy  
and  
The Substance Abuse and Mental Health Services Administration**

# About This Case Study

This case study is a resource for researchers and other scholars, policy makers, clinicians and institutions who want to improve the collection, analysis, and use of demographic data. The Advancing SAMHSA Programs in Reaching Equity (ASPIRE) dashboard is one of many efforts underway at HHS to enhance the value of demographic data collected during program administration. While the focus of the ASPIRE dashboard is behavioral health equity, this case study is broadly applicable to any team wanting to use dashboards to tell an effective data story. This document provides a general roadmap of important steps and decision points to navigate when building a useful dashboard. Each section contains both the story of the ASPIRE dashboard and suggested resources<sup>1</sup>. The Appendix contains a complete list of the resources referenced in this document. Additional resources can be found within the HHS [Resources for Improving Demographic Data Quality](#).

---

## U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES

Office of the Assistant Secretary for Planning and Evaluation  
Office of Science and Data Policy  
Division of Evidence, Evaluation and Data Policy  
200 Independence Avenue SW  
Washington, D.C. 20201

## ABOUT THE AUTHORS

*Susan Jenkins, PhD* is the HHS Evaluation Officer and Director, Division of Evidence, Evaluation and Data Policy  
*Robin Rose Saywitz, PhD, MPA* is a Presidential Management Fellow in the Division of Evidence, Evaluation, and Data Policy  
*Maura R. Reilly, PhD, MPH* is a Social Science Analyst in the Division of Evidence, Evaluation and Data Policy

## ACKNOWLEDGEMENTS

Special thanks to SAMHSA Leadership who championed the creation of the original ASPIRE dashboard and enthusiastically collaborated with ASPE on this case study.

**Trina Dutta, MPH** - Chief of Staff to the Assistant Secretary for SAMHSA

**Larke Huang, PhD** – Director, Office of Behavioral Health Equity

**Tenly Biggs, MSW** – Deputy Director, Office of Behavioral Health Equity

**Mary Roary, PhD, MBA** – Chief Equity Officer, Office of Behavioral Health Equity

**Naomi Tomoyasu, PhD** – Director, Center for Behavioral Health Statistics and Quality (CBHSQ)

**Meaghan McHugh, PhD, MPH** – Director, CBHSQ Office of Evaluation

**Marie Tate, PhD, MA** – Survey Statistician, CBHSQ Office of Evaluation

**Lindsey Gonzales, MSW** – Director, CBHSQ Office of Program Analysis and Coordination

Also, a sincere thank you to the SAMHSA staff who generously shared their knowledge and expertise through key-informant interviews: Reginé Bumper, MPH; Tanya Geiger, PhD, MPH; Brendan Gudenburr, MPH; Michael Inguillo, CAPT. Michael King, PhD, MSW; and Angie Qin.

---

<sup>1</sup> Links and references to information from non-governmental organizations are provided for informational purposes and is not an HHS endorsement, recommendation, or preference for the non-governmental organizations.

## **Abstract**

The Advancing SAMHSA Programs in Reaching Equity (ASPIRE) Dashboard case study is a collaboration between the Division of Evidence, Evaluation and Data Policy (DEEDP) in the Office of the Assistant Secretary for Planning and Evaluation (ASPE) and ASPIRE team members from the Substance Abuse and Mental Health Services Administration's (SAMHSA) Office of Behavioral Health Equity (OBHE) and Center for Behavioral Health Statistics and Quality (CBHSQ). DEEDP created this document using information from key-informant interviews with SAMHSA staff and documentation from the ASPIRE team, including project presentations, logic models, and visuals from the dashboard.

The ASPIRE dashboard is an interactive data visualization tool created to support data driven policy to advance behavioral health equity across SAMHSA programs. Over a decade prior to the creation of the dashboard, staff from OBHE and CBHSQ recognized a need to better leverage administrative data to understand which populations services were reaching, have a transparent way of analyzing administrative data, and share key lessons learned among SAMHSA's centers, grantees, and other stakeholders. In 2022 two important facilitating factors aligned to support the development of the ASPIRE dashboard. The first facilitating factor was that long-time project champions reached key leadership positions within SAMHSA. The second facilitating factor was that key hires within CBHSQ introduced new team members who possessed the skills, experience, and growth-oriented mindset needed to build a data dashboard from the ground up.

The ASPIRE team engaged leadership and potential end users early and often. The team solicited regular feedback on test versions of the dashboard and tried to incorporate as much feedback as possible into the ASPIRE dashboard. Relatedly, the team was also very intentional about how they applied best practices in displaying data and dashboard design to ensure that the result would be user friendly and intuitive.

# Table of Contents

About This Case Study.....	1
Abstract.....	2
Introducing the ASPIRE Dashboard.....	4
Laying the Groundwork.....	4
Using a Dashboard to Meet Your Data Sharing and Use Needs.....	5
Identifying Your Champions.....	6
Assembling Your Team.....	6
Valuing a Growth Mindset for Improving Data Visualization and Use.....	7
Identifying Dashboard Goals.....	7
Identifying the Priority Data.....	8
Choosing the Data to Display.....	9
Building the Dashboard and Selecting the Software.....	9
Designing the Dashboard.....	10
Avoiding the “More is Better” Trap.....	11
Choosing the Right Chart Type.....	12
Engaging Stakeholders– Early, Often, and With Care.....	14
Getting Buy-in from Leadership and Peers.....	15
Using Feedback to Build and Strengthen Relationships.....	16
Responding to Critical or Negative Feedback.....	17
Encouraging Use.....	18
Conclusion.....	18
Appendix.....	19

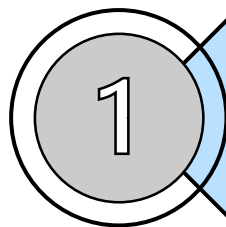
## Introducing the ASPIRE Dashboard

To gain a better understanding of the Substance Abuse and Mental Services Health Administration's (SAMHSA) programmatic reach and impact, staff from SAMHSA's Office of Behavioral Health Equity (OBHE) and Center for Behavioral Health Statistics and Quality (CBHSQ), worked together to build the Advancing SAMHSA Programs in Reaching Equity (ASPIRE) dashboard. ASPIRE is an interactive dashboard designed to support the ability of SAMHSA leadership and staff to develop data driven policies and programs that advance behavioral health equity.

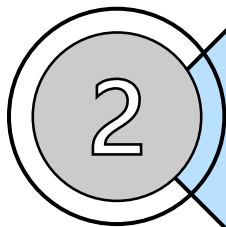
The ASPIRE dashboard includes client-level performance measurement data from discretionary grants submitted from FY2019 through FY2022. The dashboard displays Government Performance and Results Act (GPRA) National Outcome Measures (NOMs) in several formats. It provides descriptive data about the number of grants, the distribution of SAMHSA grantees across 58 states and territories. It also illustrates the comparative rates at which SAMHSA's grant programs reach different demographic groups and the extent to which that reach is proportionate to both the population and the rates of substance use within SAMHSA's service areas. Additionally, ASPIRE displays de-identified client-level data for over two million individuals including age, ethnicity, gender, housing status, race, sexual orientation, and veteran status.

## Laying the Groundwork

As SAMHSA enacted the [2011 HHS Action Plan to Reduce Racial and Ethnic Health Disparities](#), to identify and understand potential disparities in their programming, staff considered questions within two domains.



Which populations are SAMHSA grantees serving? Within their service population, which individuals are grantees retaining within their programs? How well do the service populations match the populations specified in relevant authorizing legislation and grantee award documents?



How can SAMHSA optimize on-going demographic data collection, analysis, and sharing across SAMHSA programs and grantees in order to address issues related to equity and program accessibility?

## Using a Dashboard to Meet Your Data Sharing and Use Needs

The leadership within OBHE and CBHSQ, wanted a tool to promote data driven discussions with regional office staff and grant program officers. They also wanted to assist staff in determining where programs were encountering challenges or seeing success in providing services to underserved populations. SAMHSA hosts a web-based data hub for grantee data reporting, the SAMHSA Performance Accountability and Reporting System (SPARS). However, SPARS is not designed to help SAMHSA staff or grantees analyze or compare data across SAMHSA programs. To meet the ASPIRE team’s data sharing and use needs, a new tool was needed.

Over time SAMHSA’s internal culture has valued the use of data visualization and staff have an established practice of using dashboards to engage internal and external audiences around key issues. The ASPIRE team chose a dashboard over other alternatives for displaying data to meet their needs related to:

### Flexibility of use.

- The interactive nature of ASPIRE dashboard allows users from a variety of audiences to manipulate the data for their unique needs including research, program performance monitoring, quality improvement initiatives, and required reporting.

### Data availability.

- Traditional static reporting often becomes outdated very quickly. A dashboard, however, can be continuously updated to provide timely access to data that can be used to inform decisions.



## Dashboards

“When well designed, **dashboards** enable the transformation of data repositories into consumable information. The visualizations facilitate the identification of trends and patterns, and ideally, the information presented in a dashboard is used to guide decision making and action.”

### Key features of a well-designed dashboard:

- All data visualizations (graphs, charts, tables, etc.) fit on a single screen.
- The most important indicators are displayed.
- Data are updated at regular intervals. (Bonus points if this process is automatic!)
- Displays are intuitive, easy to understand, and can be used by anyone who has access.
- Users can explore the data enable and view the data of interest to them (e.g., filtering by location, age, or gender).

*Adapted from: [Evaluation Methods: Data Dashboard](#) This article describes the basic elements and functions of data dashboards with real-world examples, and suggested resources.*

## Identifying Your Champions

Leadership across OBHE and CBHSQ became champions of the ASPIRE dashboard, using their positions to build excitement around the dashboard idea.

Since 2020, SAMHSA's leadership re-emphasized investments in equity, diversity, and inclusion related to data. This leadership focus created a window of opportunity for the staff members who began discussing the possibility of an equity dashboard over a decade earlier and had since earned promotion to positions within SAMHSA that allowed them to serve as project champions.

As agency leaders these "creative originators" had the resources to bring the equity dashboard they had been envisioning to life. It was also fortuitous that SAMHSA Chief Equity Officer had a background and interest in data and evidence and was excited about the prospect of what would become the ASPIRE dashboard.

## Assembling Your Team

At the staff level, key ASPIRE team hires had both prior experience with dashboards and an interest in data visualization as a powerful tool to facilitate the utilization of administrative data in policy decisions. Two main themes about characteristics that made the ASPIRE team successful emerged from the key informant interviews.

The first theme was the importance of practicing and applying the principles of a "growth mindset". Staff on the ASPIRE team who employed a growth mindset mentality embraced the challenge of building the dashboard and were able to take in and embrace both positive and negative feedback.



## Champions

A **champion** is an individual willing to leverage the personal or positional power they hold in their organization to benefit a project about which they are passionate. They use their power somewhat non-traditionally and typically go well beyond their expected and traditional job responsibilities.

The four most common types of champions are:

1. **Creative Originator** who is the source of and driving force behind the idea for the project.
2. **Entrepreneur** who adopts the idea and actively tries to get others to buy-in.
3. **Sponsor** who secures needed resources to promote the project and provides protection when needed.
4. **Project Manager** who handles day-to-day operations.

Research suggests that the presence or absence of a project champion significantly impacts the ultimate success or failure of a project.

*Adapted from: [The Project Champion: Key to Implementation Success - National Institutes of Health \(nih.gov\)](#)*



## Valuing a Growth Mindset for Improving Data Visualization and Use

People with a **growth mindset** demonstrate a love of learning and a resilience that is essential for great accomplishment. They are patient and humble, viewing challenges as learning opportunities and using negative feedback for project improvement. Given the numerous challenges faced when trying to present and use data in new ways, a growth mindset can be a powerful tool to take in and embrace both positive and negative feedback. Below are four benefits of having a growth mindset:

- Embracing learning new data presentation skills means moving into new fields and subject matter areas more easily.
- Taking to heart the idea that mistakes are learning opportunities is invigorating rather than discouraging.
- Understanding that most data visualization and presentation projects go through an iterative process makes it easier to receive feedback, try new strategies, and innovate.
- Having a growth mindset means understanding there is always more to learn about displaying data.

*Adapted from: [Growth mindset vs. Fixed mindset: What's the difference?](#) This article describes how having a flexible mindset focused on adaptation and learning is essential for innovation. [Why A Growth Mindset Should Be a Part of Your Overall Business Strategy](#). The article describes a growth mind set as encourage learning, development, and new ideas and foundational for learning organizations.*

The second theme was the importance of cultivating a supportive and collaborative team dynamic. On the ASPIRE team, this meant that staff felt empowered by their leadership to seek out learning opportunities to fill gaps in their knowledge around building dashboards. On the other side of the equation, leadership were confident that staff would keep the project moving forward and seek out innovative solutions for any setbacks that occurred along the way. These relationships made it possible for the ASPIRE team to develop the dashboard in-house from start to finish without contractor or other support.

## Identifying Dashboard Goals

From the start, the ASPIRE team had a clear vision for their dashboard's goals and intended audience. However, not all dashboard projects will have this level of clarity at the start. Teams that want to use dashboards should invest time early in their design process to identify their goals.



## Steps for Identifying Dashboard Goals

- Step 1: Identify the specific purpose the dashboard will serve.
- Step 2: Determine what action(s) users are expected to take based on the data presented in the dashboard.
- Step 3: Identify the target audience and gain an understanding of what they want to know and how they prefer to receive information.
- Step 4: Determine the level of data granularity required for the dashboard (e.g., high-level data for leadership decision-making or detailed data for operational decision-making)

*Adapted from: [Dashboard Design: Why is Design Important](#). This brief describes design principles critical for ensuring that a dashboard clearly communicates key information to users and is easy to use.*

## Identifying the Priority Data

The ASPIRE team had a clear vision for the kind of information that would be displayed, in this instance demographic data related to mental health, HIV treatment and prevention, and substance use service equity. Currently, the ASPIRE dashboard contains all of SAMHSA's client-level demographic data from FY 2019-2022. All the information in the ASPIRE dashboard comes from SAMHSA's Performance Accountability and Reporting System (SPARS). A major benefit of relying on SPARS data to populate the dashboard is that the data were from a single, standardized source. However, this is often not the case when building dashboards. It is common in the dashboard building process that data come from multiple sources, which requires a more involved decision-making process.



## Level of Detail

The underlying goal is to select data for display in the dashboard that support staff and leaderships' ability to monitor and analyze program performance. Too many data points can divert users' attention from the data that are most important. However, too little data will leave users "in the dark" in certain areas and not fully meet users' needs.

*Adapted from: "Business Dashboards: A Visual Catalog for Design and Deployment" (2009) by Nils Rasmussen, Claire Y. Chen, Manish Bansal. This book provides guidance for creating the right business intelligence architecture for designing and managing a dashboard project.*

## Choosing the Data to Display

Below are questions to answer when determining which data to put into a dashboard and beginning the dashboard design and development process.

- What data and metrics do users need to see?
- What contextual information is needed to make the data meaningful (e.g., targets, variance, comparisons across groups/regions)?
- Are all data directly relevant to the original goal of the dashboard?
- Is there a systematic and consistent method for obtaining the data?

*Adapted from: [Best Practices for Effective Dashboards: Dashboard Doctor Session](#). This PowerPoint provides best practices to guide dashboard planning and design. [Dashboard Design: Why is Design Important](#). This brief describes design principles critical for ensuring that a dashboard clearly communicates key information to users and is easy to use.*

## Building the Dashboard and Selecting the Software

Building a dashboard is often a non-linear, multistep process that involves developing a vision for the dashboard, selecting a software, and then iterating on the dashboard until a final version is developed.

The ASPIRE team chose Tableau to build their dashboard based on their familiarity with that software. Preexisting familiarity with a software can speed-up the dashboard development process, although familiarity needs to be weighed against a host of other factors, such as the graphical, modeling, and data capacity needs of a particular dashboard project.

When examining the cost of software licenses, it should be noted that there can be a significant difference between developer and viewer licenses. Thinking through, at the beginning, how many people will require either level of access can affect the costs dramatically. It may also be helpful to talk with people who have used the software being considered to determine if the user support is responsive and will meet the team's need during both the set-up and dashboard building process.

Interviewees who had been involved in selecting the software for the dashboard emphasized that each dashboard is unique, so considering the specific software needs of a dashboard is important. The primary factors that influenced the software selection for the ASPIRE dashboard team are shown below.

Dimension	ASPIRE Team’s Reasoning for Their Software Selection
<b>Familiarity with software</b>	The team already had a team member familiar with the software.
<b>Graphical needs and capabilities</b>	The team preferred the graphical capabilities.
<b>Data needs</b>	The team planned for the dashboard to hold a large amount of data.
<b>Modeling needs and capabilities</b>	The team had limited modeling needs for their dashboard and did not need advanced modeling capabilities.

## Designing the Dashboard

The ASPIRE team researched best practices in dashboard building and data visualization before they started to design the ASPIRE dashboard. A key best practice they followed was incorporating feedback from the target audience and potential future dashboard users throughout the design process.

During the design phase, the team sought a diverse audience for user testing. This diversity, in some instances, led to disagreement about how data should be displayed and how many data points should be presented. It was important to acknowledge all input and unique viewpoints and to keep a list of possible additional data to consider for future inclusion.

The ASPIRE team hosted multiple interactive “Office Hours”. During these events SAMHSA leadership and other potential end users were invited to “play with”, try to “break” or “stump” the dashboard, and share feedback on their user experience with the design team.

The ASPIRE dashboard design process involved multiple dashboard iterations produced over seven-weeks. The short time frame and focused iterative process made it easier to make changes



### **An Iterative Process**

“The entire reason for creating a dashboard is to assemble a unique collection of metrics with the appropriate visual presentation and easy interfaces to understand and drill down to the data level required to make effective decisions...Iterate through sketches, mockups, and prototypes to explore, evaluate, and narrow down prospective solutions. Use creativity and expertise, both internal and external to get the best ideas and the right result.”

*From: [Dashboard Design: Why is Design Important.](#)*

to the dashboard because they were consistently working on the project and able to maintain momentum.

There were approximately five major changes made to the dashboard. For example, replacing a series of bar charts with a map to display the geographic distribution of grants, programs, and individuals served. The map provided a clear and easy way to see the distribution of funds and services throughout the United States. Another major change was the addition of a re-set button. The re-set button allowed users to clear the data filters with a single click rather than manually deselecting each filter one-by-one. This seemingly simple change fundamentally improved the usability of the dashboard and yielded a more positive customer experience.

## Avoiding the “More is Better” Trap

- ❑ **Step back and carefully delineate the role a dashboard should play in program and policy decisions.** A useful dashboard can help users set goals, monitor performance, assess implementation metrics, and help to provide strategic insights. How often do you need it and at what level? Answer these questions before you decide on the frequency and granularity of data used in your dashboard.
- ❑ **Include cross-sectional and longitudinal information.** Cross-sectional information on its own can be misleading. Supplement cross-sectional data in a dashboard with long-term longitudinal trends to provide the viewer with a strategic overview. Following best practices also means displaying longitudinal trends relative to a control group.
- ❑ **Use the analytics to promote insights.** Due to their emphasis on quantifiable information, dashboards can push users to focus on analytics. Remember to distinguish between the “what”, “why”, and “how” of a phenomenon. The “what” pertains to analytics, while the “why” and “how” provide insight.
- ❑ **Use the dashboard to facilitate discussion.** Create discussion forums to encourage staff at all levels to elaborate upon the information presented through the dashboard analytics. The insights generated help address decision making, enhance programmatic and policy processes, frame the goal-setting process, and encourage stakeholder buy-in. Frequently, it is not the metrics, but the discussions facilitated by the metrics, that lead to quality improvement suggestions.

*Adapted from: [Dashboards Alone Do Not Provide Value: It's Up To Marketers To Distill Insights](#). This article provides insights to help ensure that dashboards remain focused on meeting the need that they are being developed to meet.*

## Choosing the Right Chart Type

Making an informative and easy to read dashboard means selecting the right types of charts for the job. Some charts naturally lend themselves better than others to displaying different types of data. Below is a table containing common types of analyses and a type of chart that can convey that information most effectively.

<b>If you want to show:</b>	<b>Consider this chart type:</b>
Trends over time	Line Chart
Comparison and Ranking	Bar Chart
Correlation	Scatterplot
Distribution	Box Plot
Likert Scale	Divergent Bar Chart

*Adapted from: [Best Practices for Effective Dashboards: Dashboard Doctor Session](#). This PowerPoint provides best practices to guide dashboard planning and design.*

There were also approximately 60 minor changes made to the dashboard. These minor changes included making sure that the bar charts all had the same orientation instead of some being horizontal while others were vertical, changing the order of the bar charts across the dashboard, and edits related to the location of the different tiles on the dashboard. While 60 changes may seem high, a substantial proportion of the minor changes reflected iterative tweaks suggested by users to improve their experience accessing the data.

Additionally, the ASPIRE team considered important design considerations, including making sure the dashboard was not too crowded, being thoughtful about the messages implied by different color choices (e.g., green and red implying positive and negative value judgements respectively), the orientation of figures in the dashboard, and the different types of charts and other graphics displayed in the dashboard. On the next page is a still image of the ASPIRE dashboard ([Figure 1](#)). The blue numbers one through six on the figure correspond to the six points highlighting some features that make the ASPIRE dashboard easy to navigate and understand.

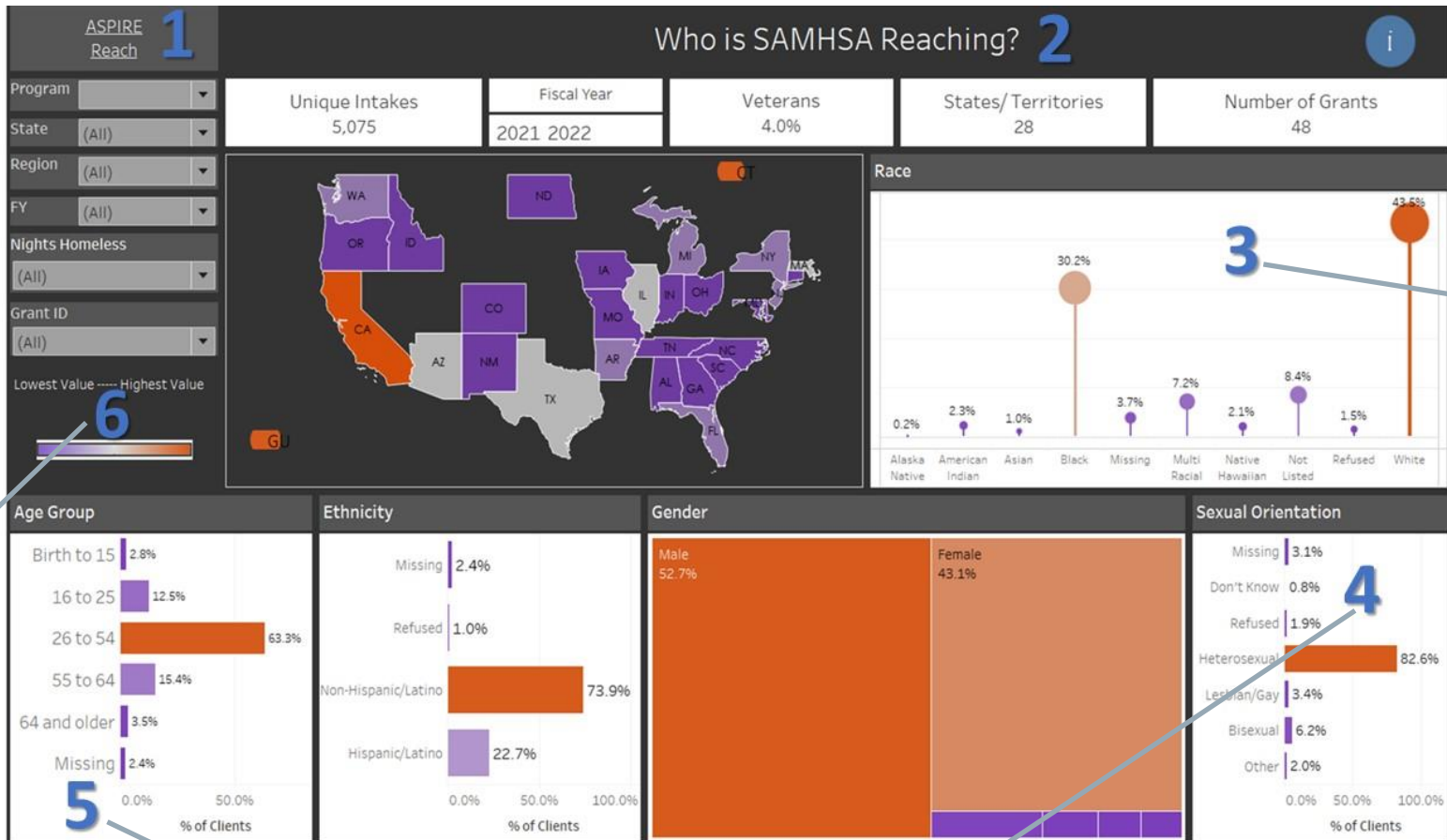
**Figure 1. ASPIRE Dashboard Landing Page**

**1. Ease of use** – the toggles in the upper left-hand corner have intuitive labels and make it easy for individual users to customize their view.

**2. Titling** – the dashboard has a title orienting the viewer to the content presented in the dashboard.

**6. Prioritizing simplicity** – there are four core colors used on the ASPIRE dashboard: white, black, purple, and orange. Black and white serve as the background and text colors. Shades of purple and orange are used to display data. Utilizing many different colors can make dashboards more challenging to read.

**3. Use of negative space** – the space between the figures makes each image distinct and easier to interpret.



**5. Figure labels** – all figures have appropriate X and Y axes labels and there is a legend explaining the colors.

**4. Colors chosen** – the orange and purple colors used here, do not have normative values attached to them by most people. Therefore, viewers may interpret the figures without the colors implying value judgements.



# Engaging Stakeholders— Early, Often, and With Care

From the beginning, stakeholder engagement was a priority for the ASPIRE team. They sought feedback throughout the entire process, beginning with early conversations socializing the dashboard concept with leadership as well as through more formal feedback sessions with agency leadership as the ASPIRE dashboard took shape. On a practical level, the early investment in stakeholder engagement made it possible for the ASPIRE team to build a dashboard that met the needs of its users regarding more easily to identifying and understanding disparities in their programming. When a dashboard, or any product, solves a real problem that users of the data have expressed it becomes that much easier for it to gain the support of proposed end-users.

There are seven strategies that the ASPIRE team employed to engage stakeholders.



**1. Keeping the ASPIRE dashboard on the leadership agenda.** The ASPIRE team developed a high-impact 5-minute presentation with dashboard visuals and project contact information. Project leadership cultivated relationships with SAMHSA administrative support staff and offered the ASPIRE project as a meeting-agenda “gap-filler.” This strategy kept the ASPIRE dashboard at the top of SAMHSA leaders’ minds and helped the team quickly gather feedback from people not directly involved in the dashboard development process.



**2. Investing in an iterative feedback process.** The team found that soliciting feedback early and often from SAMHSA leadership and center leadership and then showing them how their feedback was incorporated was an important trust building exercise.



## Feedback

**“Feedback (NOUN):** Clear and specific information that’s sought or extended for the sole intention of helping individuals or groups improve, grow, or advance.”

When **providing feedback**, find out if it’s a good time to share the feedback, and make sure you are in a comfortable space for the receiver so that you both feel like you can speak freely; stick to the core elements of fairness and focus. Focus on one topic and offer what you’ve witnessed (without judgment); keep your comments short; and engage in the conversation with a few catalyzing questions (Was this information helpful? Do we see the strength or opportunity in the same way?)

To **receive better feedback** consistently ask for feedback. Openly share with others what you are doing, invite them to share their perspectives, listen to the feedback you receive, and circle back to those that provided feedback to tell them how you used it.

*From: [How Effective Feedback Can Build Trust And Confidence](#)*





**3. Recruiting additional champions.** Having a broad base of support promotes project success. One interviewee noted that they saw past projects fail when the project did not have multiple champions to both recruit new team members and to socialize the project with other agency leaders. By noticing when leadership was asking questions about issues addressed by the ASPIRE dashboard, the ASPIRE team took the opportunity to pitch those folks on the dashboard and invited them to them join the team as project champions. One interviewee noted that incorporating feedback in a transparent manner helped create new champions for the project.



**4. Identifying stakeholders.** One step taken was to draft a list of people across the agency interested in health equity and schedule brief 15 to 20-minute meetings with all of them to give them a preview of the dashboard, talk about the goals of the dashboard, and ask for feedback.

## Getting Buy-in from Leadership and Peers

Getting buy-in from leadership and peers requires a multi-step approach.

- Understand your audience and tailor your pitch for your dashboard or data visualization project accordingly.
- Frame your dashboard as a solution or thoughtful fix to a well-established challenge in your office.
- Build a coalition before bringing your project to leadership. Having a built-in network of people who broadly support your project can help speed up the process of gaining leadership buy-in.
- Understand the best times to bring up new ideas and projects.  
*For example, is leadership historically the most receptive to supporting new projects at the end of the quarter? On Fridays? In formal meetings or during casual conversations?*
- Determine which persuasion strategy will be most effective for your specific audience.

*Adapted from: [A quick guide to getting executive buy-in - HRM online](#). This article discusses some of the latest literature on socializing innovations and getting buy-in from leadership on new ideas. [Get the Boss to Buy in](#). This article provides lists and strategies for obtaining buy-in from colleagues.*



**5. Following up and following through.** It was also important to follow up with people who provided feedback. Specifically, when the ASPIRE team was able to incorporate the feedback, they would show that person how the feedback was incorporated. An interviewee shared that this method was useful for building relationships with collaborators and helped form additional connections between program staff and agency leadership.

## Using Feedback to Build and Strengthen Relationships

Feedback can be used to build trust and build relationships among and between team members and stakeholders.

- Build connections among team members outside of the immediate context of providing feedback (e.g., go out for coffee or have lunch together). These informal interactions can help build trust, making it easier to provide and receive honest feedback.
- Spend time talking about what is going well on the project and showing off other team member's good work. Doing this can help lay the foundation for more challenging discussions in the future.
- Lay the groundwork for feedback conversations by first asking if you can provide feedback explicitly. Unsolicited feedback often comes off as criticism; further, asking if this is a good time to provide feedback can change the tone of the conversation.

*Adapted from: [How Effective Feedback Can Build Trust And Confidence](#). This article is an edited interview with expert, Tamara Chandler, the author of "Feedback: Why we fear it, how to fix it".*



**6. Being transparent when feedback is not incorporated.** A key theme from staff interviews was the challenge for the ASPIRE team of receiving feedback the team was unable to incorporate into the ASPIRE dashboard. In these moments, being upfront and clear about why the team was not going to incorporate individual feedback helped the team build trust with the feedback provider.

Effective dashboards stick to their goals, use streamlined datasets, and feature simple and intuitive layouts. Achieving that style of dashboard typically involves becoming an expert in saying no as people continue to provide feedback about changes that they would like to see. In the case of the ASPIRE dashboard, the most common reason that feedback was not incorporated was that a suggestion was outside of the scope of the

dashboard. Consistently communicating the goal of a dashboard can be useful in facilitating conversations about out-of-scope feedback. For example, the team regularly reminded testers and other stakeholders that ASPIRE's purpose was to address equity and that additional dashboards could and should be considered for different data needs and policy/planning purposes. One dashboard cannot, and should, not try to serve all data needs.

## Responding to Critical or Negative Feedback

Below are five empirically supported actions that can help you accept critical feedback openly and calmly, intentionally mine it for insight, and harness it to improve without collateral damage to your confidence and self-concept:

- Do not rush to react to the negative feedback.
- Ask questions about the feedback if the opportunity arises, either from the person providing the feedback or someone who knows their workstyle well.
- Choose a single highly visible piece of the feedback that is easy to address and make that change. This can show you are serious about incorporating the feedback, even if it is not possible to incorporate all the feedback received.
- Engage in ongoing dialogue after receiving negative feedback, as showing improvement can turn your biggest critics into champions because they understand the process you have gone through.
- Assess what parts of the feedback received can and cannot be incorporated and focus energy on what can be changed and be transparent about what cannot be changed.

*Adapted from: [The Right Way to Respond to Negative Feedback](#). This article provides five strategies for receiving and sifting through and incorporating negative feedback.*



**7. Respecting the data.** Interviewees noted that throughout the stakeholder engagement process the ASPIRE team was sensitive to how they discussed data in the dashboard with leadership and the data providers. Because the ASPIRE team developed the dashboard themselves, they endeavored to build trust with stakeholders by reassuring them that the ASPIRE dashboard would only be used help them continually improve and track their progress in a meaningful way and not to make direct comparisons between grantees.

## Encouraging Use

Moving forward, the ASPIRE team will add additional years of data to the dashboard and may consider including similar data from additional programs. Once the new data are quality checked, OBHE and CBHSQ will organize a “data party” to begin the process of disseminating the dashboard across SAMHSA.

The early investments that the ASPIRE team made cultivating relationships across the agency and at different levels of leadership is something many interviewees believe will help the roll-out process. Multiple interviewees stressed that while building a dashboard seems like a technical procedure, it is just as much, if not more, an exercise in relationship building.

## Conclusion

The development of the ASPIRE dashboard is a great example of what a team, dedicated to a specific vision, committed to best practices in stakeholder engagement and design, and excited to take on the challenge can do to improve the usability of administrative data. All the data in the ASPIRE dashboard were already being collected by SAMHSA but were challenging to access and utilize.

Now, dashboard users can more easily access and manipulate the data to, for example, isolate specific geographies or demographic categories across multiple programs. The ASPIRE dashboard makes the data more useful and usable for staff across SAMHSA interested in identifying potential disparities in funding allocation, service delivery, and outcomes in a straightforward and intuitive manner. Additionally, the ASPIRE dashboard allows program staff to facilitate conversations with the agency leadership about opportunities for programmatic and policy improvement and ways to reduce disparities.



## Data Party

A data party brings together diverse partners to review the data, discuss how the data can be interpreted, and inform final recommendations for use. Attendees provide interpretations of what the data mean and the implications for action. This process can improve the quality of interpretation, by supplying additional information that can be used to appropriately interpret data, support dialogue across diverse perspectives about the credibility and implications of data, and build support for using the findings.

*Adapted from: [University of North Carolina Data Party Planning Guide](#). And [Better Evaluation](#)*

## Appendix

Links and references to information from non-governmental organizations are provided for informational purposes and is not an HHS endorsement, recommendation, or preference for the non-governmental organizations.

Ashfort, S., & Detert, J. (2015). Get the Boss to Buy In. Harvard Business Review.

<https://hbr.org/2015/01/get-the-boss-to-buy-in>

Brath, R., & Peters, M. (Oct. 15, 2004). Dashboard Design: Why Design is Important.

DM Review Online.

[https://cs.furman.edu/~pbatchelor/csc105/articles/TUN\\_DM\\_ONLINE.pdf](https://cs.furman.edu/~pbatchelor/csc105/articles/TUN_DM_ONLINE.pdf)

Childs, S. Why A Growth Mindset Should Be a Part of Your Overall Business Strategy.

Forbes, (Sept. 16, 2019). <https://tinyurl.com/yzurnfsw>

Cote, C. (March 10, 2022). Growth Mindset vs. Fixed Mindset: What's The Difference?

<https://online.hbs.edu/blog/post/growth-mindset-vs-fixed-mindset>

Duncan, R. D. (Sept. 3, 2019). How Effective Feedback Can Build Trust and

Confidence. Forbes. <https://tinyurl.com/bd4zdfw>

Eurich, T. (May 31, 2018). The Right Way to Respond to Negative Feedback. Harvard

Business Review. [https://hbr.org/2018/05/the-right-way-to-respond-to-negative-](https://hbr.org/2018/05/the-right-way-to-respond-to-negative-feedback)

[feedback](https://hbr.org/2018/05/the-right-way-to-respond-to-negative-feedback)

Global Evaluation Initiative. (2022). Data dashboard.

<https://www.betterevaluation.org/methods-approaches/methods/data-dashboard>

North Carolina Translational and Clinical Sciences Institute. (2023). Data Party Planning

Guide. v.20230523: University of North Carolina School of Medicine.

<https://tracs.unc.edu/index.php/file-downloads-cares?download=7015:data-party->

[planning-guide](https://tracs.unc.edu/index.php/file-downloads-cares?download=7015:data-party-planning-guide)

Mittal, V. (2017). Dashboards Alone Do Not Provide Value.

<https://business.rice.edu/wisdom/expert-opinion/dashboards-alone-do-not-provide-value-its-marketers-distill-insights>

Neilson, K. (July 3, 2020). A Quick Guide to Getting Executive Buy-In. HRM.

<https://www.hrmonline.com.au/section/strategic-hr/guide-getting-executive-buy-in/>

Pinto, J. K., & Slevin, D. P. (1989). The Project Champion: Key to Implementation Success. *Project management journal*, 20(4), 15.

Poznanski-Ring, K., & Gelan, D. (2017). Best Practices for Effective Dashboards. Data Summit, Purdue University. <https://tinyurl.com/sn2jjd5y>

Rasmussen, N., Chen, C. Y., & Bansal, M. (2012). Design Tips. In *Business Dashboards: A Visual Catalog for Design and Deployment* (pp. 91-103). <https://doi.org/10.1002/9781119197904.ch14>