4.3: Guide to Data Dashboards

Data dashboards provide a convenient way to get an overview of program data. The term "dashboard" comes from automotive dashboards. The dashboard in your car uses gauges and lights to provide a summary of the many actions happening under the hood to keep the car running. Likewise, a data dashboard provides a summary of the many processes happening in your agency program.

So, what does a dashboard offer you? Some of the benefits you can obtain with a well-designed dashboard include—

- **Putting Your Data to Work.** A dashboard displays the data to help you quickly focus your attention on the needed areas.
- **Consolidating Data.** A dashboard consolidates many different data points into a single interface, so you don't have to spend time analyzing separate points or compiling reports.
- **Sharing Data.** A dashboard provides a quick snapshot of your program that can be easily shared throughout the organization.

Building a Data Dashboard

Most modern data systems offer tools for creating and customizing data dashboards. Your first step in building a dashboard is to understand your needs.

- What objectives are you trying to achieve?
- What processes do you need to monitor?
- What organizational practices do you want to influence or change?

Identifying your needs will help you to plan and build your dashboard.

Defining Your Users

In planning, your first step is to identify who needs access to the different levels of data. Are separate dashboards needed for people in different positions? What information is required for each position?

For example, a director typically requires seeing a broad overview of data. He/she might want to see data that shows the overall number of home visits or the total number of referrals over a specific period. This is often called the "30,000-foot view" — like seeing a landscape from an airplane. It provides a broad view without the details. This broad view might be important to share with tribal leadership.

A supervisor would likely want to see more specific details, such as what specific home visits are scheduled for the next 7 or 14 days or how many visits have been performed by each visitor in the last 30 days.

An individual home visitor will likely only want to see a very narrow set of data detailing his/her own recent or upcoming home visits.

Identifying data dashboard users and what information they need to be able to access is the first step in creating your dashboard.

Defining Your Measurements

Your next step is to identify what areas to track and what data points will help the dashboard users follow those areas. Data points, called *key performance indicators* (KPIs), measure how well a process is working. Following the right KPIs allows the user to monitor and improve the processes that most reflect program functioning.

Once again, answering some questions is useful. What processes are you trying to improve? What issues are you trying to resolve? Consider KPIs that would help answer the questions. Some examples of KPIs to track may include—

- **Home Visit Referrals by Day.** This KPI is useful for monitoring spikes or drops in requests.
- **Referrals by Source.** This is a valuable KPI for understanding the origin of your requests.
- **Home Visits by Home Visitor.** This KPI is beneficial for a supervisor to use to manage workloads across his/her team.

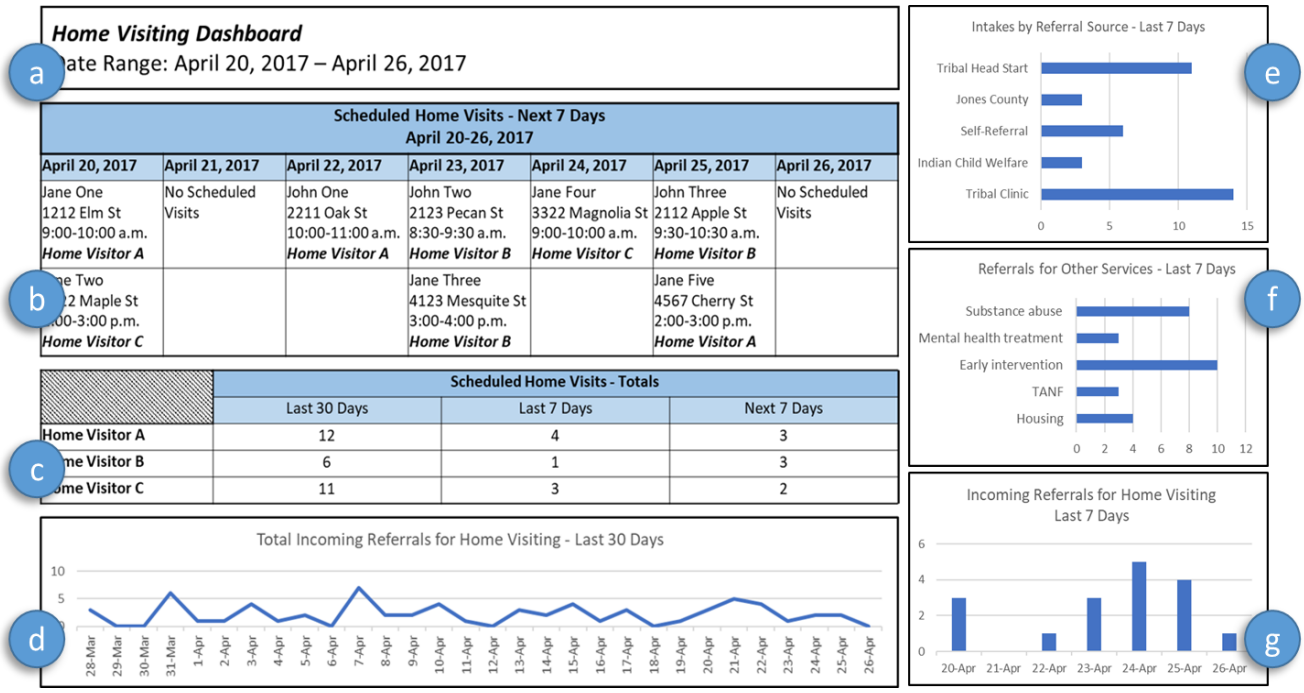
Non-KPI data also provide a great deal of value on a dashboard. For instance, listing upcoming scheduled home visits allows a supervisor to quickly determine which home visitors should be assigned new participants.

Choosing Your Design

Finally, consider how you want to display the data in your dashboard. For example, data tracked over time, such as the number of home visits or referrals, is best displayed with a line or column graph that clearly shows spikes and drops. On the other hand, a simple list or table is appropriate for other data, such as upcoming scheduled visits.

Understanding the Sample Dashboard

The sample gives several examples of the kinds of data that could be included in a data dashboard.



Home Visiting Dashboard
ate Range: April 20, 2017 – April 26, 2017

Scheduled Home Visits - Next 7 Days
April 20-26, 2017

April 20, 2017	April 21, 2017	April 22, 2017	April 23, 2017	April 24, 2017	April 25, 2017	April 26, 2017
Jane One 1212 Elm St 9:00-10:00 a.m. ***Home Visitor A***	No Scheduled Visits	John One 2211 Oak St 10:00-11:00 a.m. ***Home Visitor A***	John Two 2123 Pecan St 8:30-9:30 a.m. ***Home Visitor B***	Jane Four 3322 Magnolia St 9:00-10:00 a.m. ***Home Visitor C***	John Three 2112 Apple St 9:30-10:30 a.m. ***Home Visitor B***	No Scheduled Visits
e Two 2 Maple St 00-3:00 p.m. ***Home Visitor C***			Jane Three 4123 Mesquite St 3:00-4:00 p.m. ***Home Visitor B***		Jane Five 4567 Cherry St 2:00-3:00 p.m. ***Home Visitor A***	

	Scheduled Home Visits - Totals		
	Last 30 Days	Last 7 Days	Next 7 Days
Home Visitor A	12	4	3
me Visitor B	6	1	3
me Visitor C	11	3	2

a **Title.** A dashboard includes a descriptive title that states the purpose and the primary time period covered by the data. If multiple dashboards are created for different users, the title should also specify the user for whom it is intended.

b **Scheduled Home Visits.** A simple table showing upcoming scheduled home visits enables a quick review of what the home visitors and supervisors need for planning.

c **Scheduled Home Visits - Totals.** A table that displays recent and upcoming visits shows the caseload for each home visitor.

d **Total Incoming Referrals for Home Visiting.** A line graph shows the total number of referrals over the last 30 days. A line graph is useful for showing change in volume over time.

e **Intakes by Referral Source.** A bar graph is a graphic display of referral sources.

f **Referrals for Other Services**. A different bar graph shows referrals for services.

g **Incoming Referrals.** A column graph represents referrals from the prior week. A column graph works like a line graph, showing spikes and drops in volume over time.

Other Uses for a Dashboard

A dashboard offers several distinct functions depending on the goals for which it was designed and the intent of the user. Two of the most common ways to use a dashboard are listed below.

- **Notifications.** The dashboard provides a quick and easy method to check for unexpected problems. For example, a referral source stops sending potential clients. The drop is visible on the dashboard. The change "triggers" the need for a followup to see why this is occurring.

- **Data Quality Monitoring.** Data quality monitoring involves tracking data to accomplish two main goals: ensuring data is accurate and intact and using the data to make program improvements. Some data systems provide built-in tools for data quality monitoring. These tools check for missing or incorrect data and provide alerts when they occur. Additionally, many systems allow for setting visible baselines in your charts so improvements to meet program goals can be targeted.