

Incorporate Technology for Data Collection and Reporting

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About the Series

The **BestPractices4Data** series focuses on sharing innovations and best practices for grantees, from grantees.

In 2023, the Substance Abuse and Mental Health Services Administration (SAMHSA) convened listening sessions with grantees and government project officers to learn about strategies that grantees use to optimize data collection processes. Produced by the SAMHSA Center for Financing Reform and Innovation (CFRI) contract, the series of issue briefs aims to improve efficiency in the use of grant funds by providing opportunities for grantees to learn from each other. The briefs identify best practices that help reduce costs associated with resource-intensive trial and error attempts typical of new grantees who are trying to figure out the best ways to collect data.

All SAMHSA grantees are required to collect data as a condition of their funding. Grantees sometimes refer to these as Government Performance Results Act (GPRA), National Outcome Measures (NOMs), client-level data, participant-level data, program-level data, or progress reports. The **BestPractices4Data** series brings together innovative and best practices that grantees use to address the most common and complex challenges associated with grant-required data collection activities.

Grantees can determine their data collection requirements by reading their grant's Notice of Award (NOA).

SAMHSA grants allow a percentage of funds to be set aside for evaluation purposes. Some grantees struggle with deciding which approach is the best fit for their organization. Grantees note that required data can be time burdensome to collect, especially when data are viewed as not useful or duplicative of questions asked during routine care. Additionally, traditional types of data entry, such as pencil-and-paper methods, are prone to human error. Below are some grantee best practices for incorporating technology into data collection.

Best Practices



Determine the best way to embed data collection into your routine and whether technology is an option



Compare options to purchase software



Learn from other grantees about their approach to technology



Consider hiring data collection experts

This issue brief considers the common challenges identified by SAMHSA grantees. It highlights innovative and practical ways that grantees address these challenges.

Determine How to Collect the Data

There are several ways grantees collect and report data into SAMHSA’s Performance and Accountability Reporting System (SPARS). SAMHSA offers several no-cost options. Additionally, there are more costly software options that some grantees find helpful and worthwhile.



SAMHSA No-Cost Options

SAMHSA offers several free data collection tools. There are Microsoft Word and PDF versions of the client-level data collection tools for all SAMHSA centers on the SPARS website.

SAMHSA recently released comma-separated value (CSV) templates for batch (e.g., multiple clients or surveys) reporting of grant-required data into SPARS. CSV files are compatible with most types of data software options, including Excel. These files, when opened, look like grids with labeled columns for easy data entry.

Option to Purchase Software

Some grantees find that purchasing software to help with data collection and reporting into SPARS is worthwhile in terms of reducing burden on clinical and program staff. Determining the type of technology that is the best fit for your organization can be difficult. There are advantages and challenges associated with each option. When planning, consider these questions:



How much money is the organization able to spend?



How much capacity does the staff have for learning software?



Does the organization only want to use the technology for data collection, or does the organization want it to help analyze the data collected?

Best Practices Spotlight

The State Opioid Response (SOR) program aims to respond to the opioid crisis by increasing access to medication for opioid use disorder. States are required to collect GPRA client data from all service providers receiving SOR funding. In some states, this can mean coordinating data collection from hundreds of varied service providers, across large geographic areas, all with different data capabilities.

To address the complexity of coordinating among many service providers, some states hire an external data expert to coordinate, collect, submit, and analyze their data. Centralizing the data management within the state increases the accuracy and efficiency of data collection and decreases the administrative burden on service organizations and the state.

Software Options for Purchase

Some grantees choose to purchase software to help collect, report, and analyze their data. Some common software options are Microsoft Forms, Qualtrics, and REDCap.

	Advantages	Limitations
<p>Microsoft Forms Microsoft Forms Surveys, Polls, and Quizzes</p>	<ul style="list-style-type: none"> • Part of the Microsoft Office suite of products • Automatically houses data in Excel • Easy-to-create forms 	<ul style="list-style-type: none"> • Takes time to learn how to program forms • Limited ability to integrate with non-Microsoft programs • Limited customization, which requires attention to column headers
<p>Qualtrics Qualtrics XM: The Leading Experience Management Software</p>	<ul style="list-style-type: none"> • Extensive customization and question types • Forms are easy to set up • Exports to many programs, including Excel 	<ul style="list-style-type: none"> • Customization (depends on the account level) • Offline app comes with an additional fee • For complicated forms, advanced programming may be required
<p>REDCap Unified Data Science Platform REDCap Cloud</p>	<ul style="list-style-type: none"> • Extensive capabilities • Data quality checks are built in • Creates audit trails to see where and when data were changed • Exports to many programs, including Excel 	<ul style="list-style-type: none"> • Must work with a REDCap institution (cannot purchase individually) • Can be expensive • For complicated forms, advanced programming may be required

Forms

Forms are interactive webpages where interviewers can automatically input data from the client.

Many software options support the use of forms. Forms can be programmed to include the items from the required grantee assessment and can be developed to include drop-down menus with potential answers. They can also include open text fields as needed. However, it is important to avoid using public accounts or storing personally identifiable information to ensure data confidentiality.








Grantees note the following advantages to using forms:

- Sometimes utilize “skip patterns” so that interviewers only ask questions relevant to that interview
- Automatically populates into a CSV file for later batch reporting of client-level data; must ensure that column headers match the CSV batch upload tool
- Makes the grant-required data collection tool easier to use

Consider Hiring Data Collection Experts

Some university faculty and private companies specialize in working with SAMHSA grantees to collect grant-required data and report it into SPARS. Several SAMHSA grantees reported contracting with these outside organizations to help reduce burden on their service provider workforce. Others note that having an outside evaluator is helpful for identifying ways that the data can help improve services and to highlight program successes. As with all data strategies, grantee organizations should take into account ways to ensure data are confidentially collected and stored.

Ways Data Collection Experts Have Helped SAMHSA Grantees

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|---|---|
|  <p>Create online forms out of data collection instruments</p> |  <p>Incorporate skip patterns in order to reduce survey complexity</p> |
|  <p>Use QR codes or hyperlinks to bring up forms on mobile devices</p> |  <p>Provide analyses of data</p> |
|  <p>Populate follow-up data collection forms with previously collected client data</p> |  <p>Report data into SPARS</p> |
|  <p>Link all surveys of one individual together to look at change over time</p> | |

Additional Resources

[SAMHSA Center for Financing Reform & Innovation \(CFRI\)](#)