

# CSAT TA Package

## Keys to Valid Data Collection, Maintenance, and Storage

There is a saying in computer science: *Garbage in, garbage out*. In relation to data, this axiom reminds us that poor, invalid, or incomplete data will produce results that are also poor, invalid, or incomplete.

Your program and client data are part of an important set of indicators that can be used to assess your organization's performance in treating clients. Therefore, it is important that you carefully monitor all points of the data management process, from collection and entry to reports and analysis.

**About this Guide.** This Technical Assistance (TA) Package was developed by the Center for Substance Abuse Treatment (CSAT). It was created for treatment professionals such as clinical staff, outreach staff, and anyone who collects, enters, and manages program and client data.



This TA Package provides you with simple and effective guidance that can help to ensure that your program collects quality data. In particular, it can help you to ensure that your program collects quality Government Performance and Results Act (GPRA) data. Doing so helps you to demonstrate the effectiveness of your program, identify areas for improvement, and make informed program decisions.

**What is in this Guide?** This guide will review key methods of valid data collection that can be implemented within your program before and after data collection begins. This TA Package will answer the following key questions:

- What practices maximize the quality of my data?
- How do I implement these practices?
- What does having quality data mean for my program?

## Key Definitions and Concepts

Let's begin with two key definitions. *Quality assurance* refers to activities that ensure the quality of the data before the data collection begins. *Quality control* refers to efforts to monitor and maintain the quality of the data during the data collection process (Szklo & Nieto, 2007).

Quality assurance and quality control are key components to research. Most components of a program are related to one of these two activities. For the purposes of this TA Package, we will focus on the quality assurance and quality control activities related to data collection.

**Quality Assurance.** Quality assurance activities before data collection relate to standardizing processes and thus preventing or minimizing systematic errors in collecting and analyzing data. These activities can include such things as staff trainings and written manuals that contain detailed descriptions of standardized data collection procedures.

**Quality Control.** Quality control activities can include ongoing monitoring of your data collection procedures, as well as conducting studies on samples of the data to assess validity and reliability between hard copy CSAT-GPRA interviews and the data uploaded to the online CSAT-GPRA system (Kahn & Sempos, 1989).

# CSAT TA Package

## Keys to Valid Data Collection, Maintenance, and Storage

### Institutionalize Valid Data Processes

To have valid data, you must value data. To successfully practice valid data collection techniques, your program must value having quality data. There are several ways to ensure that your program staff values the importance of quality data and that quality data management efforts become part of your program.

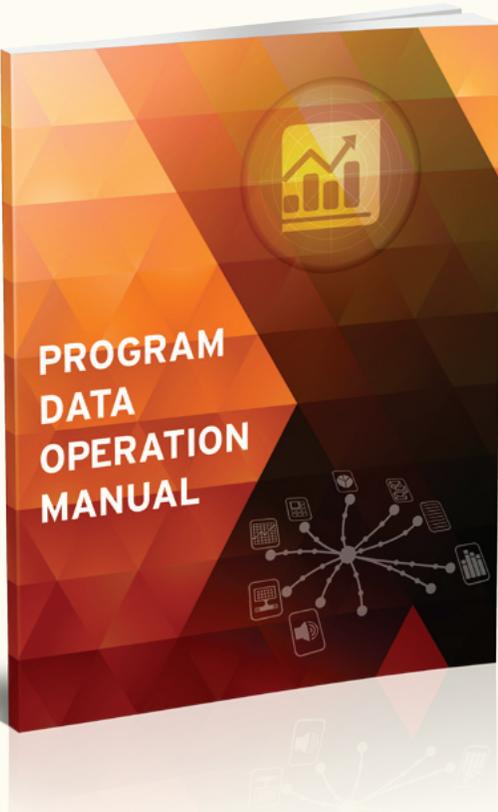
The following are simple but effective tips to enhance staff appreciation of quality data and to help them understand their roles in collecting, maintaining, and using quality data.

#### Create a Data Team

An important way to institutionalize the promotion of quality and valid data is to develop a performance management team. This team can develop data collection standards, ensure that data collection standards are followed, and enforce approved post-data-collection processes.

#### Develop an Operation Manual

Program evaluation is closely tied to performance management. Thus, one of the main responsibilities of the performance management team is to create an operation manual. The manual would be used by staff members to ensure that all data collection techniques are strictly followed. It would promote standardized data collection techniques. The performance management team would train other program staff how to use the operation manual and how to incorporate program evaluation methods.



#### Train Program Staff

Understanding the way program evaluation works can help your staff value the quality of your program's data. Careful training of program staff involved in data collection is imperative for the standardization of data collection and should emphasize adherence to procedures specified in the operation manual.

#### Conduct Data Reviews

Once staff members have received training on the operation manual and evaluation methods, and data collection has begun, the performance management team can regularly review data throughout the lifetime of the program. One standard technique for reviewing data is to conduct random audits. This means that staff would compare about 10 percent of the data uploaded to the online CSAT-GPRA system with hard copy versions of the CSAT-GPRA interviews.

These types of audits can ensure that any anomalies in the data are found earlier rather than later and can be resolved. In addition, reviewing the data with the overall staff and showing them how data are used can help them understand why having quality data is important.

# CSAT TA Package

## Keys to Valid Data Collection, Maintenance, and Storage

### Audit Your Data for Quality

One way to monitor the quality of your data is to perform random data audits throughout the year. An audit is a way to assess the results of your program's CSAT-GPRA interviews for such issues as services received, compliance, or completeness of records. Audits help to ensure that all staff members understand that their data collection methods need to always be in top condition.

Ideally, audits should be conducted randomly throughout the year without the staff's advance knowledge. Doing so helps to keep everyone on their toes and promote better overall data quality. There are several ways to perform audits of your data. The examples below have worked well for other CSAT grantees and may be useful for your program.

### Compare Hard Copy With Online Data

A good way to determine if you have quality data is to compare data that were uploaded to the online CSAT-GPRA system with hard copy versions of CSAT-GPRA interviews. To determine if your data were entered correctly, randomly compare approximately 5 to 10 percent of your uploaded online data with the corresponding hard copy versions of the CSAT-GPRA interviews.

To do so, log onto the CSAT-GPRA website and select the Data Download link. Select your grant, select the relevant information, and download the data to your computer. Next, determine how many client interviews you have and how many hard copy interviews you need to obtain for a comparison.

For example, if your grant has 100 total client interviews and you want to compare 10 percent of the online data to the hard copy interviews, select every 10th client ID, as shown in the graphic illustration of a data download. Pull hard copies of the CSAT-GPRA interviews corresponding to the circled IDs.

### Conduct Field Interviewer Audits

Your field interviewers should be audited at least once each year. New hires should be audited more frequently. By reviewing their hard copy CSAT-GPRA interviews, you can determine if your staff members need additional training on how to administer the instrument. If they do, they can take online courses and register for webinar and face-to-face trainings using the CSAT-GPRA website.

	A	B	C	D
1	ClientID	ClientType	InterviewType	IntakeSeqNum
2	59418	1	5	1
3	59992	1	5	1
4	59970	1	5	1
5	60377	1	5	1
6	57731	1	1	1
7	58581	1	1	1
8	58655	1	1	1
9	58600	1	1	1
10	14079	1	1	1
11	58667	1	1	1
12	58488	1	1	1
13	58670	1	1	1
14	58677	1	1	1
15	58669	1	1	1
16	57886	1	1	1
17	58365	1	1	1
18	58678	1	1	1
19	58867	1	1	1
20	58848	1	1	1
21	58771	1	1	1
22	58814	1	1	1
23	57825	1	1	1
24	58756	1	1	1
25	57647	1	1	1
26	57979	1	1	1

# CSAT TA Package

## Keys to Valid Data Collection, Maintenance, and Storage

### Maximize the Quality of Your Program's Data

Your program probably collects substantial valid data but also has opportunities for improvement. The following are a few simple but effective strategies that you can implement to maximize the quality of your data while being time- and cost-efficient.

#### Promote Quality Intake Data Collection

The best way to have quality and valid data is to start with good intake data collection techniques. Your program should have a collection of GPRA-related materials, all of which are easily found on the CSAT-GPRA website. These include the CSAT-GPRA Tool, GPRA Instructions Question-by-Question guide, the GPRA Tool Codebook, and Frequently Asked GPRA-Related Questions.

All staff should be trained in and have a strong understanding of these materials. During trainings, discuss CSAT-GPRA interview issues and questions so that all staff members have a deep understanding of the CSAT-GPRA Tool. Your program evaluator can provide advice about training techniques, data collection methodology, and other information regarding quality data. Obtain and create staff trainings from the CSAT publication *Performance Management for Substance Abuse Treatment Providers*, available at <http://www.tie.samhsa.gov/documents/documents.html>.

#### Establish Processes That Maximize Good Follow-up Data

Having quality intake data doesn't make much of an impact if your follow-up data isn't just as good. To ensure that standards are met in follow-up interviews, create processes that promote interest in the follow-up data. For example, reviewing follow-up data can help staff to understand the progress their clients are making. This type of feedback can energize staff to continue their hard work at keeping data collection techniques to a high standard. Consider conducting regular follow-up data reviews at staff meetings. This information can summarize your program's successes and challenges, and it can also help you identify factors that contribute to your success.

#### Collect Other Data to Complement Your CSAT-GPRA Data

The CSAT-GPRA Tool may not cover all the data elements that are of interest to your program. Most programs collect certain data in addition to the CSAT-GPRA Tool. Examine your program's mission statement. Do you provide unique services? Do you have special populations? Do your clients have special treatment needs? If so, and if relevant questions are not elicited using the CSAT-GPRA Tool, develop your own survey questions and collect and monitor that data.

### Use the Plan, Do, Study, and Act Cycle

Using the Plan, Do, Study, and Act (PDSA) Cycle can help your program identify problem areas, identify a solution, and improve your data collection process. Meet with your staff to identify your program's problem areas. Survey your clients to identify problems or barriers from their perspective as well. Select an area for improvement and a change strategy, implement the planned change, assess the effects of the change, and expand implementation if successful or consider other strategies if unsuccessful.



# CSAT TA Package

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### Don't Forget the Basics!

Obtaining and maintaining valid data begins long before you conduct CSAT-GPRA interviews with clients. Valid data efforts continue throughout the life cycle of a program's delivery of service through follow-up. The following practices are critical to every program and have important roles in obtaining and maintaining valid and quality data.



### Continually Update Locator Forms

At every point of contact with clients, review the information on their locator form. Ask what information has changed. Ask specific questions about where clients are living, what they are doing, and what plans they have for the near future. With that information, update the locator forms. The more client contact information you have, the better chance you have to locate that client for the follow-up interview.

### Develop Reminder Systems

Consider using simple ways to remain in touch with clients. These can include postcards, birthday cards, alumni newsletters, e-mail lists, and alumni events, such as barbecues. These activities help programs remain in touch with clients and provide easy ways to remind them that you care about them, that you can provide needed services, and that a follow-up interview is coming up. At the same time, use your program's automated management systems to create reminders for staff to contact clients for follow-up interviews and other important events.

### Create Tracking Letters and Scripts

Develop tracking letters, scripts, and tracking and follow-up protocols well before you need to use them and before collecting data. In this way, staff can use available letters, scripts, and protocols immediately rather than having to quickly develop them when follow-up interviews are due.



### Use Social Media

As social media evolves, consider using these tools as a way to remain in touch with your clients. Some programs help clients create e-mail accounts as a way to stay in contact. Others use text messaging, LinkedIn, Facebook, Twitter, YouTube, web postings and blogs, and their program website to remain in touch with clients. Conduct client surveys and ask them how they use social media and seek permission to link with them. Ask other providers who have similar client populations how they use social media with their clients. Ask about their lessons learned.

### Provide Incentives

Incentives are useful tools to remain in touch with clients and to encourage them to participate in follow-up interviews. Identify incentives that clients view as useful and desirable. Programs typically use such incentives as prepaid gift cards, prepaid phone cards, grocery store cards, movie tickets, and coffee shop cards. Incentives provided at the completion of interviews help to entice clients to participate in follow-up interviews.

# CSAT TA Package

## Keys to Valid Data Collection, Maintenance, and Storage

### Use Online Reports to Keep Track of Your Data

Using the online CSAT-GPRA system, you can generate reports that can help you to monitor your data for quality and validity. Consider generating these reports on a regular schedule. Systematic monitoring helps identify data-related problems as they emerge and helps promote easier resolution.

#### Follow-up Rate Reports

Use the online system to generate 3-month, 6-month, and 12-month *Follow-up Rate Reports*. The most important report will be the *6-Month Follow-up Rate Report*. It will show you how many 6-month follow-up interviews are due for your grant to date, how many 6-month follow-up interviews have been received within the window to date, and the follow-up rate.



#### Missing Data Frequency Report

Generate the *Missing Data Frequency Report* to determine which CSAT-GPRA questions your clients are not answering. Using this report, you can identify potential problems that occur during the interview process. For example, you may discover that many clients are not answering sex-related questions. Use this information to explore possible explanations. Conduct brief client surveys asking about your findings. Examine whether program staff need enhanced training regarding the questions that have lower responses. Use the PDSA Cycle to help resolve the issues.

Ensure that you document the date when you run reports. Remind staff that it can take 24 to 48 hours for the online reports to update with the data you have entered into the system. Monitoring the dates on which data entry and running reports are done can reduce confusion.

### Finding Fraudulent Data: What Should We Do?

Sometimes organizations find that staff members are fraudulently entering data into the CSAT-GPRA system. If this occurs, there are steps you can take to rectify this conduct and protect your data.

**Reassign**—the staff member away from your grant and remove access to hard copy interviews and your electronic data monitoring system. If you are not able to reassign them away from client data, your grant management team will need to decide if the staff member should be terminated.

**Immediately alert**—your Government Project Officer. Being proactive about possible fraud will help the Substance Abuse and Mental Health Services Administration (SAMHSA) to work with you on this issue. After being notified of possible fraud, SAMHSA may decide to send an external audit team to further investigate the impact on your grant's data.

**Identify**—the scope of the problem. When did this behavior begin? How many cases have been affected? What are the client IDs that were entered into the system by this staff member?

# CSAT TA Package

## Keys to Valid Data Collection, Maintenance, and Storage

### Ensure Data Privacy

Data privacy is strongly linked with data collection. The Health Insurance Portability and Accountability Act (HIPAA) and subsequent regulations provide protection for the privacy and security of certain individually identifiable health data.

The HIPAA Privacy Rule, or *Standards for Privacy of Individually Identifiable Health Information*, established national standards for the protection of certain health information. It created regulations for the use and disclosure of *protected health information*, defined as any information collected by an entity covered by HIPAA which concerns health status, provision of health care, or health care payment information that can be linked to a client.



The HIPAA Security Rule, or the *Security Standards for the Protection of Electronic Protected Health Information*, established national security standards for protecting certain health information that is held or transferred in electronic form. The HIPAA Security Rule addresses the technical and nontechnical safeguards that covered entities (such as treatment and prevention programs) must put in place to secure individuals' electronic protected health information.

These rules are relevant to your CSAT-GPRA data. Your program must provide security measures to ensure that your clients' data are not seen or used by anyone who is not authorized. There are many steps that you should take to protect client data, including those described below.

### Provide Physical Protection

Programs must limit physical access to their facilities while ensuring that authorized access is allowed. Programs should have policies and procedures to protect the hard copies of CSAT-GPRA interviews, which include storage in locked filing cabinets, preferably within locked rooms. HIPAA regulations require programs to implement policies and procedures to specify the proper use of and access to workstations and electronic media. Likewise, programs must have policies and procedures regarding the transfer, removal, disposal, and reuse of electronic media.

### Protect Client IDs

When creating client IDs, do not use client identifiable information. In particular, do not use clients' names, Social Security numbers, or dates of birth when creating client IDs.

### Protect Your Devices

Grantees use desktops, laptops, and tablets, such as iPads, to record clients' answers. Use usernames and passwords to protect client confidentiality. Develop policies about the use of tablets and laptops including precautions to minimize misplacing these portable devices.

### Ensure Data Integrity and Transmission Security

Programs must implement policies and procedures to ensure that electronic protected health information is not improperly altered or destroyed, and electronic measures must be put in place to confirm that the information was not improperly altered or destroyed. Programs must implement technical security measures that guard against unauthorized access to electronic protected health information that is being transmitted over an electronic network.

# CSAT TA Package

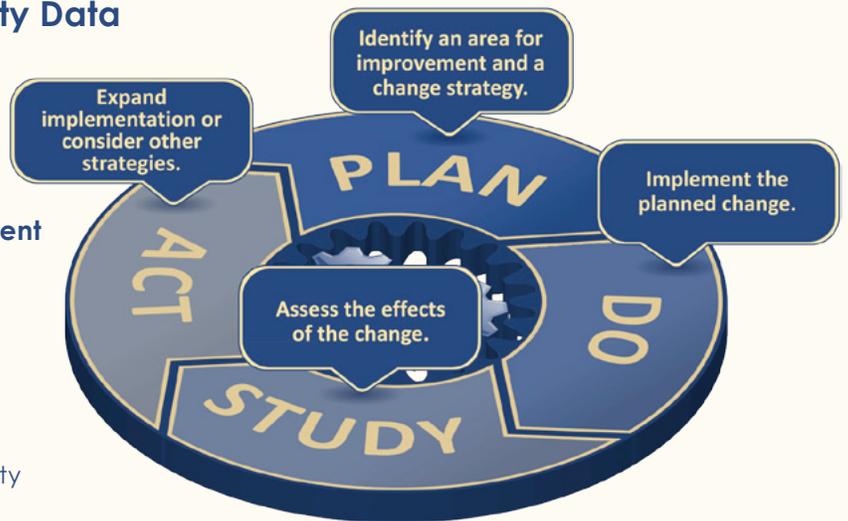
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### Recognize the Benefits of Quality Data

Having program data that is an accurate representation of your program and clients provides several important advantages.

#### Allows for Continuous Quality Improvement

Quality data provides information needed for *continuous quality improvement* (CQI). CQI is a management approach to improving and maintaining quality that emphasizes internally driven and relatively continuous assessments of potential causes of quality defects. It includes activities designed to either avoid decreases in quality or correct problems at an early stage.



To undertake CQI, SAMHSA created the Process Improvement Model which includes four main steps: Plan, Do, Study, and Act. As shown in the graphic, the PDSA Cycle works by planning a strategy to use to improve a specific area, carrying out the planned change, studying the effects of the change (both positive and negative), and expanding the implementation if successful or considering other strategies if unsuccessful.

For more information on the CQI approach and the PDSA Cycle, visit the CSAT-GPRA website and click Technical Assistance in the left-hand menu. There you can find a CSAT TA Package titled *Developing and Implementing Continuous Quality Improvement for Treatment Programs*.

#### Provides Information to Market Your Program

Having data that accurately reflects the clients in your program can inform you and your staff. It is also valuable for your stakeholders and funders, the community, and current or potential clients. Marketing your program to stakeholders and the community is an important activity for any program. Having quality data can ensure that you are presenting your program accurately. For more information on using data to market your program, visit the CSAT-GPRA website's Technical Assistance area. There you can find a CSAT TA Package titled *Using Data to Market Your Program*.

#### Demonstrates Progress to Help Sustain Your Program

Quality and valid data can help you demonstrate the impact that your program has on your clients. This information can be used toward sustainability efforts before your grant funding ends. Having reliable program and client data allows you to describe your program's impact accurately. For more information on sustainability efforts, visit the CSAT-GPRA website's Technical Assistance area. There you can find a CSAT TA Package titled *Preparing for the Future: Strategies for Program Sustainability*.

**CSAT-GPRA website:** <https://www.samhsa-gpra.samhsa.gov>

### References

Szklo, M., & Nieto, F. J. (2007). *Epidemiology: Beyond the basics* (Second edition). Sudbury, MA: Jones and Bartlett Publishers, Inc.

Kahn, H. A., & Sempos, C. T. (1989). *Statistical methods in epidemiology*. New York City, NY: Oxford University Press.

# CSAT TA Package

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### Keys to Valid Data Collection, Maintenance, and Storage: Summary

**Institutionalize Data Quality Efforts.** To institutionalize data quality efforts and to enhance staff appreciation for quality data, create a performance management team, develop a data-related operation manual, train project staff about quality data, conduct regular data reviews, and audit your data for quality. Compare your uploaded online data with the information on hard copy CSAT-GPRA interviews and conduct field interviewer audits.

#### Maximize the Quality of Your Program's Data.

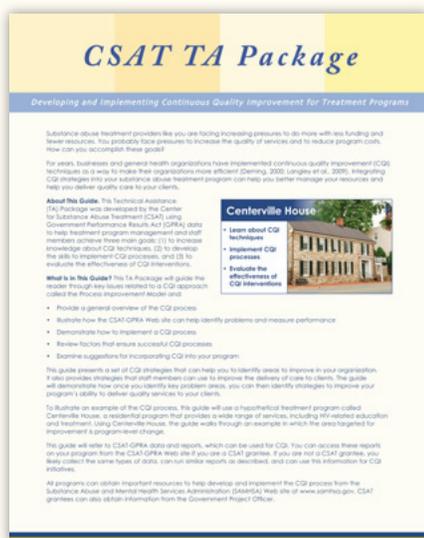
Maximize the quality of your program's data by promoting quality intake data collection, establishing processes that maximize good follow-up data, and collecting other data to complement your CSAT-GPRA data. Use the PDSA Cycle to identify and resolve data-related problems.



**Don't Forget the Basics!** Processes and procedures help to improve data quality. Thus, remember to continually update client locator forms, develop reminder systems to remain in touch with clients, create tracking letters and scripts ahead of time, use social media to remain in contact with clients, and provide incentives that are perceived by clients as desirable.

**Use Online Reports to Keep Track of Your Data.** Use the online CSAT-GPRA system to generate reports that can help you to monitor your data for quality and validity. Generate *Follow-up Rate Reports* to see how many follow-up interviews are due for your grant to date, how many follow-up interviews have been received within the window to date, and the follow-up rate. Generate the *Missing Data Frequency Report* to determine which CSAT-GPRA questions your clients are not answering.

**Ensure Data Privacy.** Comply with HIPAA privacy and security regulations regarding CSAT-GPRA data. Provide physical protection for both hard copy and electronic data. Avoid using client identifiable information when creating client IDs. Protect your electronic devices and always use usernames and passwords to protect client confidentiality. Develop policies and procedures to ensure that electronic health information is not improperly altered or destroyed and to guard against unauthorized access to electronic health information that is being transmitted over an electronic network.



**Recognize the Benefits of Quality Data.** Having program data that is an accurate representation of your program and clients provides several important advantages. It allows for continuous quality improvement, provides valuable information to market your program, and demonstrates progress that can be useful in efforts to sustain your program.

**Obtain Additional CSAT TA Packages.** Visit the CSAT-GPRA website to review and download additional CSAT TA Packages. They can provide you with valuable help on such topics as developing and implementing continuous quality improvement, using data to market your program, and promoting program sustainability.