

How to improve your data quality for a 360-degree view into your programs

Introduction

Millions of Americans depend on federal and state services to help them receive basic necessities, such as healthcare, food, housing, and transportation. While the importance of these programs is without question, it seems that every year shrinking budgets mean the agencies that provide these services must do more with less—fewer qualified staff members, aging technology, and inefficient processes.

It goes without saying that state and federally funded agencies must be very judicious about every dollar they allocate. The problem? Reduced spend on IT has created an environment in which siloed databases and inaccurate information make it difficult to track beneficiaries across their various programs. This can lead to overpayment and a duplication of services in many cases, wasting valuable resources that could be awarded to others in need.

Your agency works hard to help people. Don't let bad data get in the way. Here are five steps you can take to improve your approach to data quality and gain a better view into your programs:

1. Evaluate the current state of your data.

The challenge many agencies face is that they can easily identify the issues caused by their bad data (such as poor satisfaction ratings from those they serve), but a lack of definitions and process around data quality makes it difficult to quantify the amount of bad data that exists in their systems. In order to evaluate the current state of your data, you will want to assemble a team that represents all areas of the agency (such as finance and IT) to define what good data looks like to your agency. Is it reducing the amount of duplicate entries, lowering the amount of null values, or having more accurate contact information?

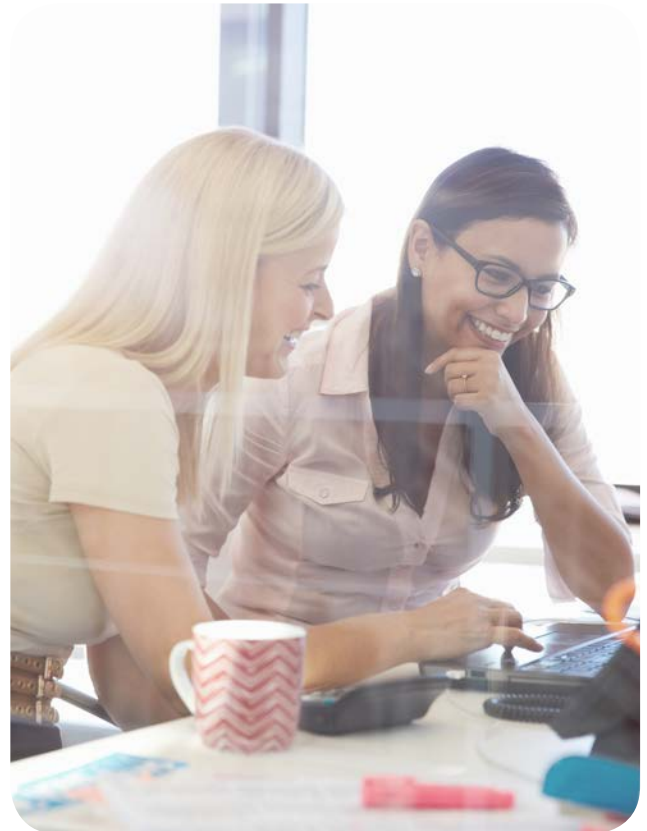
By defining what good data quality means for your organization, you can begin to target concrete aspects of your datasets to look for errors or anomalies. While agencies will typically turn to their IT departments to write SQL queries to comb through the data, we recommend using a data profiling tool that empowers your business analysts to perform discovery processes across full volumes of your data. Because these users are much more likely to understand the context around which certain information is used, they are better equipped to determine whether your data is fit-for-purpose or not.



2. Cleanse the data in your systems.

Once you've identified the bad data in your systems, the next step is to cleanse the data. While there are several ways to do this, we recommend starting with email, address, and telephone number validation tools. These solutions are specifically designed to work with authoritative data sources to ensure the information you have is up-to-date and accurate. For instance, batch and real-time address validation solutions check against data from the U.S. Postal Service® to determine if an address entered is deliverable or if more information is needed.

In addition to checking your data for accuracy, as part of the cleansing process you will want to standardize the formatting of your data to one consistent standard. For instance, do all of your postal codes contain ZIP+4 information, or do you only capture the first five digits? Do some of your records spell out state names, and other records use two-letter abbreviations? Taking this opportunity to decide the formats that work best for your agency will help to ensure that all records are standardized moving forward. This will help you in the long run if your goal is to integrate datasets to achieve a 360-degree view into your records.



3. Promote a culture of data quality.

Your data quality initiative is only as effective as the people who use it. While explaining the importance of correct and standardized data to your staff is necessary, one-off trainings tend to lose their effectiveness over time as bad habits and workarounds creep back in. In fact, more than a third of agencies in the public sector say that human error is the main cause of data inaccuracies.

That's why it's important to develop and promote a culture of data quality within your agency. Every member of your agency's staff should understand their relationship with the data that they have access to. In addition, they should understand that they are responsible for the quality of that data. By creating a culture of data quality, you'll ensure the processes are upheld consistently long beyond a single training session.

How do you extend this culture of data quality to those who supply information from outside your agency, such as through an online portal? We recommend using intuitive data validation tools that offer suggestions to users as they type to ensure the data they enter is accurate and formatted correctly. This proactive approach to data quality will help ensure those entering information online are providing accurate data.

4. Automate processes to reduce human error.

More than 30 percent of public sector agencies say they spend a majority of their time manually cleansing data before analysis. This means that expensive resources (your employees) are being used to perform manual tasks that could otherwise be automated. By using tools that can run business-defined data quality checks automatically, you can free up your staff's time to work on projects that add value to your agency. In addition, by removing the human involvement from many of your processes, you'll reduce the possibility for human error. More value, less waste, and fewer errors? It's a win-win-win.

5. Modernize your IT infrastructure.

Sometimes it's necessary to start fresh, especially if your legacy systems no longer support the needs of your organization—and this may mean a data migration or modernization project is in your future. But, did you know that data quality issues are the main delay in data migrations? Before you secure federal funding and hire consultants to begin working on the modernization project, you'll want to ensure you've followed these steps to improve your data quality. This will make your modernization project much more efficient in terms of time and money.

If you're working with a third-party vendor or consultant to do the data migration, you can use the definitions for data quality you established to set clear, business-defined success metrics. If your internal staff will be performing the migration, invest in a tool designed for business analysts that performs data preparation tasks. This will help you to ensure the data being migrated to your new system conforms to the business's needs. With nicely integrated data, you'll be able to match records from across your various programs.

While modernizing your IT infrastructure can be an effective way to leverage your data to provide enrollees with the correct services for their needs and to reduce inefficient spend, completing a migration successfully is a long shot if you don't address the quality of your data first. By following these steps, you'll be able to bring your data quality up to the next level and begin to gain a 360-degree view into your programs.

Your agency provides valuable services, but a shrinking budget means that you have to spend every dollar carefully. Make sure your modernization project goes according to plan—we're here to help.

[Learn more](#)