Description of audio Data Quality Review Best Practices

Session Overview:

- Why the emphasis on data quality?
- What are the elements of high-quality data?
- How should grantees and commissions assess data quality for their sites/subgrantees?
- What are some common “red flags” to look for when reviewing programmatic data?
- What corrective actions should grantees and commissions take if they encounter data quality issues?
- What resources are available to help with data quality?

CNCS’s emphasis on data quality is nothing new. It has always been a fundamental requirement for AmeriCorps grantees and State Commissions to report correct, complete, and timely programmatic and financial data to CNCS, and you have always been held accountable for meeting that requirement. We hope and expect that all of you have been doing your best to do that. However, it has become increasingly apparent that some of the data being submitted to CNCS via Grantee Progress Reports, Federal Financial Reports, and other reporting mechanisms does not necessarily make sense or hold up under scrutiny. And CNCS gets a lot of scrutiny! As a taxpayer-funded program, we are responsible to the American public to be effective stewards of their money and to ensure that their investment is being used responsibly and is achieving meaningful outcomes.

CNCS relies on the demographic and performance measure data you provide to us to tell the story of the collective impact of AmeriCorps State and National and to justify our continued presence in the Federal budget. There are a lot of eyes on our data, from the White House and Congress to grassroots organizations across the country, and it is essential for those stakeholders to be able to trust the outputs and outcomes we are reporting to them. At the grantee and Commission level, you are also responsible to accurately report your program impacts to the state and local stakeholders who partner with you and provide matching support.

At both the national and local levels, we need to be able to use correct programmatic and financial data to make high-stakes program decisions. All of us need to know what interventions are achieving the desired results to help us figure out how best to allocate AmeriCorps member resources and whether program designs need to be modified. We also need to know whether grant funds are being spent effectively and in a timely fashion or whether those funds need to be re-focused elsewhere. Those types of judgment calls can’t be made in a vacuum; we need sound data to form the basis for those decisions.

Finally, the Office of the Inspector General has stated that their audits of AmeriCorps programs and Commissions may include a review of programmatic data, not just financial transactions. As a result, it’s important for all grantees and Commissions to have their internal houses in order with respect to their systems for collecting and reviewing data and ensuring its quality.

Most of you represent national direct grants or State Service Commissions that have multiple operating sites and/or subgrantees. Many of your sites and subs also collect data from a number of different service locations. At every level, it is essential to pay attention to the specific demographic and PM data being reported up the chain and to have assessment strategies in place to ensure the quality of the reported data.

For the next several slides, we will focus on five elements of high-quality data (read the bullets). For those of you who have had recent site visits from your CNCS Program Officer, you may recognize these from the new Data Quality tab in the CNCS Monitoring Tool. We will talk in detail about each of these elements of data quality: their definitions, how they should be assessed, and potential issues you may encounter in these areas when looking at subgrantee/site data.

Here are some strategies to assess data validity:

- Ask to review the data collection tools used by the program. Compare them to the program's objectives and approved performance measures, as well as the NPM Instructions to make sure that any required tools are being used. Make sure to look at both pre- and post-assessments if applicable.
- Ask programs to describe their protocols for collecting data. Make sure that they are assessing the beneficiary population identified in the approved application, and that the protocols are correct for the type(s) of tool being used (e.g., pre-test administered at the beginning of the program and post-test administered after the program concludes). Check the NPM Instructions to make sure programs are following any required protocols for data collection (timeframe, methodology).
- Ask to see a completed data collection tool. Make sure the responses are sufficient to allow the program to assess whether or not there has been a change in knowledge, attitude, behavior, or condition. Ask how the responses are reviewed, scored, and tabulated.

Issues with tools (read each bullet, then provide the info below as examples):

- Tool meant to measure increased knowledge or skills actually measures how satisfied the participants are with the program
- Program gives pre-test that is different than post-test, or uses retrospective survey instead of pre-post
- Program uses teacher feedback to measure improved academic performance rather than standardized test as required by NPM ED5/ED30.

Issues with data collection protocols (read each bullet, then provide the info below as examples):

- Program that measures increased job readiness is assessing skill gains for AmeriCorps members, not beneficiaries

- Programs report individuals who are currently participating in the program as having completed it

Here are some strategies to assess data completeness:

- Maintain a list of all subgrantees or sites and record that each one has submitted data for each particular report

- Ask to see progress reports or source documentation (sign-in sheets, test results, etc.) provided by each of a subgrantee's or site's service locations. Verify that no service locations are missing, and that the data reflect a genuine attempt to assess all beneficiaries served at that location, not just a sub-set of them (unless the program has an approved sampling plan).

*Note: response rates below 100% should not be considered to be incomplete data unless the site/sub did not make an honest attempt to gather data from all beneficiaries. Remember that sites should not be extrapolating data (e.g., doubling the tallies obtained from the 50% of beneficiaries that responded to the survey).

- Ensure that sites/subgrantees are reporting data with the same frequency and that the reported values correspond with the same time periods. Most commissions/grantees should utilize a standard reporting schedule and template for their sites/subs that aligns with the CNCS reporting periods.

Some sites or service locations failed to report data, or the data got lost in transit

Subgrantees or sites are collecting data for only a fraction of their total beneficiaries; maybe they only send surveys to 1 out of every 10 participants, or collect test data from students in only 1-2 classrooms.

Sites report data at different times and intervals, resulting in varying degrees of completeness for any given reporting period; some reports cover 6 months while some only cover 2-3.

Here are some strategies to assess data consistency:

- Ask subgrantees/sites to show you written procedures that guide which data they collect, and how. Ask how they disseminate this guidance to staff and members every year and how they check regularly to ensure that everyone is following it

- Ask the individuals responsible for collecting data to articulate the definitions of the data they collect and/or the procedures they use to collect it. Check for inconsistencies between different sites, and also check the definitions used by the program against the NPM Instructions and Demographic Indicators definitions provided by CNCS. This is especially important when there has been recent staff turnover; make sure to cross-compare answers between new and seasoned staff members.

Programs let sites self-define performance data and create their own procedures for how it will be collected, resulting in numbers that don’t mean the same thing from one site to the next.

Staff or members collecting demographic and performance measure data are never informed about the official CNCS definitions or required protocols, or nobody checks up on them to make sure they are using the definitions/protocols consistently.

Staff and member changes during or between program years result in a shift in how the program defines and collects their data. This could be because of breakdown in knowledge transfer, insufficient training of new staff, or new leadership with different ideas about how things should be done.

Here are some strategies to assess data accuracy:

- Direct grantees and Commissions are responsible for the aggregation of numbers from your subgrantees or sites. Double-check your own addition for the demographic totals you report to CNCS to make sure the numbers are added up right. Then get a colleague or some other fresh pair of eyes to review the numbers and check the math for you before you submit it.

- Ask subgrantees/sites for a list of data from their service locations. Verify that the numbers add up to the total reported values. Ask how the subgrantee/site double-checks that they have compiled the values correctly.

- Ask to see the source data for one or more data points reported by a site or service location – that could be sign-in sheets, survey results, test scores, etc. Check to make sure that no individuals are counted more than once. CNCS outputs/outcomes/demographics are written to capture participation and impacts for unique individuals, not instances, so each person should be counted only once regardless of how many times they participated/were served. Ask what systems the program/site has in place to avoid double-counting.

- If a site is involved in more than one national service program, ask them to describe to you how they ensure that they are not double-reporting beneficiaries or volunteers for both programs. Unique individuals should be reported only once to CNCS.

Skipping a number, adding an extra zero, etc. It's amazing how easy it is to do this, especially if you're in a hurry to meet a reporting deadline. It's also amazing how hard it can be to see, especially if you are the person who inputs the data.

Individuals participate in a particular program more than once, and the program's data collection system does not include a way to check for and combine multiple entries. Or the same person participates at more than one service location and there is no cross-checking for duplicates when the data are combined.

- Two CNCS grants support the same or connected interventions (e.g., State and National and VISTA members serve alongside each other to benefit a particular population), and both programs report the same outcomes or recruited/supported volunteers to CNCS.

Here are some strategies to assess data verifiability:

- Ask to see source documentation for one or more data points (sign-in sheets, survey results, test scores, etc.), and ask your subgrantee/site to talk through the process of how the reported value was generated from that source documentation. Remember that CNCS requires actual numbers, not guesses or approximations. Ask where the source documentation is stored and for how long it is saved.

Ask to see subgrantees' or sites' written plan to ensure that the data they collect and report is correct prior to submission to you. Ask them to talk you through how they implemented their quality control plan for a particular data point.

Subgrantees/sites do not have source documentation to back up the data points reported to you, or the reported values are inconsistent with the source documentation

Programs do a back-of-the-envelope approximation of what they think the values are, or should be, rather than basing them on collected data.

May indicate lack of understanding of the definition of completion, and/or failure to follow their own approved program dosage (number of days or hours of participation required for completion)

May signal estimation of numbers rather than use of actual source data

May be a symptom of double-counting, math errors (including reporting % rather than raw numbers), misunderstanding of definitions, and/or incomplete data from sites

May indicate inconsistent use of definitions or data collection protocols, and/or double-counting or incomplete counting in some areas

May be a sign of "drift" in data collection protocols or definitions over time

May result from math errors and/or misunderstanding of definitions

May signal invalid instruments for measuring outcomes (don't measure an actual change in knowledge, attitude, behavior, or condition)

Notify your CNCS Program Officer and discuss with him/her the best way forward.

If data quality issues are the result of invalid tools, incorrect data collection protocols, or use of wrong definitions:

- Have the subgrantee or site switch to the correct tool/protocol/definitions if they are still able to collect data on program activities using the new tool/protocol/definition (i.e., if it is still early in the program year, if a pre-test has not already been administered using the old tool, and/or if the data can be corrected retroactively)
- If the subgrantee or site cannot change tools/protocols/definitions at this point in the grant year, instruct the program not to report values measured using the incorrect tool/protocol/definition. Work with the subgrantee/site to switch to the correct

tool/protocol/definition for the next grant year. Document the reason why the data are not being reported from this subgrantee/site this year.

If data quality issues are the result of incomplete reporting, math errors, or double-counting/double-reporting:

- Obtain the missing information from the subgrantees/sites, identify and subtract out the duplicate values, and/or correct the math errors.
- Work with the subgrantee/site to put together a quality-control system moving forward to ensure that all service locations are reporting their full set of data, that the subgrantee/site is adding numbers correctly, and that there is no double-counting or double-reporting.

If you cannot verify data quality because of missing or incomplete source documentation:

- Work with the subgrantee/site to put together a system to document and retain the source of all PM and demographic data moving forward.
- If there is little or no evidence to support the claimed value, instruct the subgrantee/site not to report the implausible figure. Document the reason why the data is not being reported from this subgrantee/site this year.

Ask your CNCS Program Officer for the latest version of the CNCS Monitoring Tool. Grantees and Commissions are strongly encouraged to add Data Quality as an element in their own monitoring tool and to assess the five elements of data quality routinely during monitoring visits to sites and subgrantees.