## **TEFT Demonstration: Promising Practices**

HCBS Experience of Care Survey Series Vol. 1: February 2015



# Maximizing Data Quality In HCBS Experience of Care Survey Data Collection Efforts

Julie Hayes Seibert, Ph.D.





### Maximizing Data Quality in HCBS Experience of Care

States involved in the Demonstration Grant for Testing Experience and Functional Assessment Tools in Community-Based Long Term Services and Supports (TEFT) are in the unique position of assisting the Centers for Medicare and Medicaid (CMS) in testing the validity and reliability of a new survey tool known as the Home and Community Based Services (HCBS) Experience of Care (EoC) survey. The HCBS EoC survey is designed to:

- Function as a cross-disability tool, suitable for individuals with physical, intellectual, cognitive and developmental disabilities;
- Focus on participant experience, not satisfaction;
- Address dimensions of quality valued by HCBS participants; and
- Align with existing Consumer Assessment of Healthcare Providers and Systems (CAHPS®) tools.

As part of the TEFT initiative, Truven Health Analytics is working with the TEFT grantees to conduct a field test of the EoC Survey. Once field test analyses have been performed and survey items finalized, CMS will seek a CAHPS® trademark and National Quality Forum (NQF) endorsement of survey measure(s).

Due to the rigorous testing required for the CAHPS® trademark and NQF endorsement, ensuring data quality is important. Moreover, obtaining accurate survey data is essential to maintaining the integrity of the HCBS EoC survey project. TEFT grantees should be able to assure stakeholders (CMS, state legislators, advocates, providers, program participant, and taxpayers) that the data collected accurately reflects the responses of beneficiaries surveyed.

This document provides information for the TEFT state grantees about maximizing the quality of the survey data that will be collected. Multiple strategies are offered in this guidance, and while it is not necessary to implement all of them, a multi-pronged approach will be the most robust and will decrease the probability of inaccurate

and/or unusable data.

#### SELECTING DATA COLLECTORS

Quality assurance begins with the selection of data collectors. A state may decide to rely on state personnel to collect the data, may hire contract workers or may choose to select a survey vendor. Each option can require different data quality strategies.

#### Conducting the Survey "In-House"

Using state personnel. Using state personnel can assist in data collection quality as the individual will be knowledgeable about the participants the program serves and will have a familiarity with program terminology and the service delivery system. However, states must avoid using as surveyors individuals who are providers of HCBS, including care coordinators/case managers. The EoC asks the beneficiary to assess their experience with these providers and s/he may not feel comfortable providing frank feedback directly to his/her provider – thus compromising the integrity of the data.

Hiring contract workers. The state may opt to manage the survey "in-house" and hire contract staff to conduct interviews. In this case, it is recommended that the state attempt to work with individuals that are familiar with survey operations or state programs or who have worked on previous state projects. Additionally, background checks and reference checks are recommended.

#### **Contracting with a Survey Vendor**

Request a copy of the vendor's quality assurance plan for data collection. An experienced survey vendor should have an established quality assurance process in place. One way a state can learn about it is to request information regarding the vendor's quality assurance process in the state's request for proposal (RFP) for the survey procurement.





Include quality assurance mechanisms in the contracting vehicle. States may consider specifying in the survey vendor's contract the required quality assurance processes. This can include requirements for training, hiring and monitoring interviewers, reporting on progress and provision of data to the state.

#### BEFORE GOING INTO THE FIELD

Prior to beginning the data collection process, states may take several steps to ensure data quality, including requiring or reviewing survey software, providing or approving data collection protocols and reviewing or attending training sessions.

Use of CATI or CAPI Programming. The use of computer assisted telephone interviewing (CATI), computer assisted personal interviewing (CAPI), or other electronic means of data collection will help ensure data quality. CATI and CAPI programming will help standardize skip patterns, ensure items are not unintentionally left blank and will decrease data entry errors. TEFT grantees may require survey vendors to provide their programs to the state for review to ensure accurate data capture, ensure correct program terminology is used and to ensure any state customization is included.

**Standardized data collection protocol.** A standardized data collection protocol including scripts to set up interview appointments, interviewer scripts, guidance for complicated questions and standardized data reporting mechanisms will assist in ensuring

data quality. These resources are available for TEFT grantees on the TEFT technical assistance web site at <a href="http://ta.teftweb.net">http://ta.teftweb.net</a>. The state should also develop a mechanism for an interviewer or the vendor to obtain technical assistance for any questions or issues encountered



in the data collection process. This would be an important

role for the state's TEFT EoC project manager to fill.

Standardized training program. Standardized training programs either provided by the state or survey vendor will increase data quality. The TEFT Technical Assistance contractor (Truven Health Analytics) will provide resources to states to assist in any Experience of Care survey training event the state wishes to require. If the state opts to contract with a survey vendor for data collection, they should consider attending survey vendor training sessions to answer programmatic questions and clarify any administration issues.

#### Emphasis on data quality during the training process.

An important mechanism for ensuring data quality is to inform all interviewers that the quality of their data collection work will be evaluated by careful checks on internal and logical consistencies. The checks may be carried out by survey supervisors, the state or via statistical programs that can check for data outliers or unexpected results.

#### COLLECTING THE SURVEY DATA

When the survey is "in the field" or while the data are being collected, there are several quality assurance steps the state may take or require of the survey vendor.

**Frequent communication with interviewers**. The state or survey vendor should engage with interviewers on a regular basis to discuss data collection efforts and identify any data or collection issues. Contact may happen more frequently at the beginning of a survey effort and then occur on a weekly or semi-weekly basis.

**Periodic on site/in-person meetings with interviewers.** Some survey vendors may manage interviewers remotely or from another state. To ensure quality, these vendors should have regular on-site or in-person meet-

ings with the interviewers.



HEALTH ANALYTICS



**Live monitoring.** For telephone interviews, some survey vendors will live monitor (listen in) on a percentage of the interviews. If the interviewer requires improvement, they are counseled and a larger percentage of their interviews are monitored. For in-person interviews, the vendor may also require the survey supervisor to sit in and observe the first few interviews for each interviewer to supplement training and ensure high quality.

**Review of recorded interviews.** Some survey vendors use computer audio recording (CAR) as a part of their business structure. This allows for random, periodic review of telephone interviewers to check for adherence to the protocol and accuracy in data coding. Vendors may elect to review a percentage of calls for all viewers based on longevity and previous job performance, with newer interviewers receiving a higher percentage of reviews and experienced, high-performing interviewers less review.

#### Data checks by survey vendor to ensure data integrity.

When they receive a certain percentage of data, survey vendors may analyze results to see if there seem to be any outliers in the data and follow up, if needed. For example, if a large percentage of beneficiaries are responding "Don't know" to specific questions or if there are a number of illogical skip patterns, this may warrant follow up to determine if additional guidance is needed for interviewers. Some survey vendors may also conduct statistical tests (such as t-tests) to determine if there are any statistically significant differences in the patterns of data collection by the interviewer.

Data checks by states to ensure data integrity. States may also elect to conduct data checks in addition to the checks that the survey vendor runs. One strategy is to require vendors provide to the state data for the first 25 completed surveys and then the state analyzes the data for any anomalies or unexpected results. States may analyze the data to check on items such as ensuring beneficiaries are appropriately identifying program staff in the identification questions, ensuring all appropriate survey questions are administered and ensuring responses seem logical.

Built- in operational checks. As an operational check for

quality, some survey vendors have different staff for setting up interviews than for conducting them. In-house phone staff make contact with the program participant, gain consent from the program participant and/or guardian and make the appointment for the interview. The inhouse phone staff has control of the in-person field interviewer's schedule. The beneficiary is given the inhouse phone staff contact information in case they need to change or cancel the interview appointment, or in the event the interviewer does not appear for the interview. This approach can help discourage interviewers from submitting interviews with fraudulent (made up) data.

Follow up quality calls. For in-person interviews, some survey vendors will conduct follow-up calls to ask the beneficiary about how well the interviewer performed. Questions may include timeliness, courteousness and communication skills. The call evaluates interviewer performance but it also serves as a check to determine if the interviewer actually conducted the interview.

# COMPLETION OF SURVEY DATA COLLECTION

When all the survey data have been collected, states and their vendors should engage in some final data checks to ensure data quality.

**Data cleaning.** After the completion of data collection, it is recommended that the state or the vendor check the raw data for errors. The state may wish to run preliminary reports to check for potential data errors (e.g., results attributed to the wrong program or mode, results from employment module are incomplete). Any potential errors should be double-checked and validated with the interviewer if necessary.

#### **Post Collection Data Assessments.**

After data cleaning, the state may wish to conduct an internal review of preliminary reports with program experts to check for potential data errors or inappropriate results.







# HOW TO HANDLE COMPROMISED SURVEY DATA

Despite all best efforts, a state may be faced with finding compromised, inaccurate or fraudulent data. Remediation can vary and will depend upon what is causing the problem, how much data is compromised and when the data compromise is discovered.

Identify the cause of the data issue. Data quality can be compromised by inaccuracies in data collection software or insufficiently trained interviewers. An accurate identification of the source of the data quality issue will dictate the nature of the remediation required. For example, mistakes in software may require that all software be recalled and repaired, or poorly trained interviewers may require additional training or supervision.

Identify the amount of data compromised. The amount of compromised data can have an impact on the remediation steps taken. Small errors in data collection can usually be identified and manually corrected. For example, data entry errors related to participant program or obvious errors for participant age can be easily checked against administrative records and corrected. However, larger scale errors, such as survey-wide missing responses, may call for other kinds of remediation. Data issues such as these may require that questions be dropped from analysis and/or not reported.

Identify when the data is compromised. The timing of when the data quality issue is identified has a great impact on the type of remediation conducted. It is always best to discover a data quality issue early in the data collection process so that a remediation strategy can be implemented before the errors become pervasive. Data quality errors found later in the data collection process can compromise entire data collection efforts, placing the survey endeavor at risk.

#### RISK OF COLLECTING COMPROMISED SURVEY DATA

States will expend much effort and many resources on collecting Experience of Care survey data for their program(s). States will likely wish to leverage the information from the surveys to help assess the quality of service delivery in their HCBS programs and to devise quality improvement strategies.

States will expend much effort and many resources on collecting Experience of Care survey data for their program(s). States will likely wish to leverage the information from the surveys to help assess the quality of service delivery in their HCBS programs and to devise quality improvement strategies.

However, if the quality of your data is compromised, you run the risk of:

- Not being able to use the survey data in your quality improvement endeavors;
- Not being able to compare the results with previous program performance or similar programs;
- Having wasted public resources; and
- Disillusioning program participants and stakeholders.

Investing in the quality of your data collection effort is well worth the effort. Consider making the investment at every juncture of the data collection process — contracting with survey vendors,

training and monitoring interviewers, and cleaning the data post collection. It will be time and resources well spent!







#### REFERENCES

North Illinois University, Responsible Conduct in Data Management. <a href="http://ori.hhs.gov/education/products/">http://ori.hhs.gov/education/products/</a> n illinois u/datamanagement/dctopic.html Retrieved: November 4, 2014.

Baker, J., Gentile, C., Markesich, J., Marsh, S., Panzerella, E., Weiner, R. Ensuring Data Quality: What Criteria Do Monitors Use to Rate Interviewers? *Survey Practice*, Vol. 6, no 1, 2013.

Rita, M., Thissen, M., Park, H., Nguyen, M., Computer Audio Recording: A Practical Technology for Improving Survey Quality, Survey Practice, Vol. 6, no 2, 2013.

# About the TEFT Demonstration & The Promising Practice Series

In March 2014, CMS awarded TEFT planning grants to nine states to test quality measurement tools and demonstrate e-health in Medicaid community-based long term services and supports (CB-LTSS). The grant program is designed to field test an experience of care survey and a set of functional assessment items, demonstrate personal health records, and create a standard electronic LTSS record.

Grantees are participating in one or more of the four **TEFT components**:

- Experience of Care (EoC) Survey The EoC survey elicits feedback on beneficiaries' experience with the services they receive in Medicaid CB-LTSS programs. It was designed as a cross-disability survey, i.e., it is population agnostic. As contractor to CMS, Truven Health Analytics is currently conducting a field test of the survey in all nine grantee states with a range of CB-LTSS beneficiaries, including frail elderly, physically disabled, intellectually disabled and developmentally disabled, those with acquired brain injury and person with severe mental illness. In the out years of the demonstration, grantees will administer the finalized survey to their CB-LTSS beneficiaries and use the results to assess and improve quality in their programs.
- Continuity Assessment Record and Evaluation (CARE) Under prior initiatives, CMS invested in the development of the CARE for use in post-acute care settings. Under TEFT, Research Triangle Institute modified some CARE items for assessing CB-LTSS beneficiaries. TEFT grantees will provide a sample of beneficiaries across disabilities upon which the adapted CARE items will be field tested in 2015. Following the field test, the CB-LTSS items will be finalized and grantees will then demonstrate their use in their CB-LTSS programs.





- Personal Health Record (PHR) Grantees will demonstrate use of PHR systems with beneficiaries of CB-LTSS.
   The PHR is intended to provide CB-LTSS grantees with a range of personal LTSS and health information to facilitate decision making about care. The PHR can encourage a more active role for beneficiaries/caregivers in managing care and result in better outcomes through more efficient management of services.
- **Electronic Long Term Services and Supports Standard (e-LTSS)** Grantees will pilot test an e-LTSS standard in conjunction with the Office of National Coordinator's (ONC) Standards and Interoperability (S&I) Framework.

This document is the first in a series of several Promising Practice offerings that the TEFT TA Contractor will issue over the course of the TEFT Demonstration. These Promising Practices draw upon the experiences of TEFT grantees as they address the various components of TEFT. They are intended to inform the ongoing work of the Demonstration grantees as well as other stakeholders interested in incorporating aspects of TEFT into related endeavors.

#### **TEFT CONTACTS**

Beth Jackson, Ph.D.
Director,
TEFT Technical Assistance Contract
Truven Health Analytics
beth.jackson@truvenhealth.com

Kerry Lida, Ph.D.
TEFT Demonstration Lead
Centers for Medicare and Medicaid
Services
kerry.lida@cms.hhs.gov

