Sue Ellen Hansen, Grant Benson, Ashley Bowers, Beth-Ellen Pennell, Yu-chieh (Jay) Lin, Benjamin Duffey, Mengya and Kristen Cibelli Hibben, 2016

Introduction
Quality Framework
Guidelines
- **1. Build a solid coordinating center.**
- **2. Develop a sustainable quality management plan.**
- **3. Perform quality assurance activities.**
- **4. Perform quality control activities.**
- **5. Create a quality profile.**

References
Appendices: A | B
Further Reading

Introduction This chapter presents a framework for assessing quality in multinational, multicultural, or multiregion surveys, which we refer to as '3MC' surveys, followed by guidelines for managing and assessing quality throughout survey lifecycle. To monitor and control the performance of survey operations, survey organizations have developec methods and procedures to prevent and correct problems that can affect survey data quality . Such methods and proc are often referred to as 'quality assurance' (Guideline 3), which refers to the planned procedures and activities an organization uses to ensure that the study meets quality requirements. A concept closely related to quality assurance survey process quality management, otherwise referred to as 'quality control' (see Figure 4), which refers to a planne system of process monitoring, verification and analysis of indicators of quality, and updates to quality assurance pro to ensure that quality assurance works. In some respects, quality control (Guideline 4) may be viewed as part of qua assurance . However, they are separated in this set of guidelines to make monitoring and controlling performance an product quality an explicit part of quality management (Guideline 2). In monocultural surveys, assessing the quality survey data requires adequate documentation of the entire survey lifecycle and an understanding of protocols used t quality. In such surveys, there may be challenges in overcoming methodological, organizational, and operational bar when performing quality assurance and quality control. For example, a country may not have the infrastructure, or a organization may not have the means to implement a study entirely according to survey best practices. In 3MC surv projects, the challenges increase. As noted by , “quality assurance and quality control programs are, in general, less prominent and visible in cross-national comparative studies than in national surveys”. 3MC surveys hinge on the comparability or equivalence of data across cultures. Moreover, 3MC survey quality assessment procedures and crit become more complex with additional survey processes, such as adaptation and translation of questions and harmon of data across multiple surveys (see Adaptation, Translation, and Data Harmonization), leaving little room for qualit assurance and quality control. This is especially true in countries with limited “financial, methodological, and techn resources and expertise” . Given the magnified quality assurance and quality control problems in 3MC surveys, as s by , it is of critical importance to make sure to include these quality programs, insofar as possible, in 3MC surveys. survey lifecycle illustrates, quality and ethical considerations are relevant to all processes throughout survey produc Survey quality can be assessed in terms of fitness for intended use (also known as "fitness for purpose"), total surve and the monitoring of survey production process quality, which may be affected by survey infrastructure, costs, resp and interviewer burden, and study design specifications.

↑ Ba

Quality Framework Survey quality is a vague concept, which has multiple definitions and origins in two different developmental paths . One path is the total survey error paradigm; the other path focuses more on quality manageme sciences, including fitness for use and survey process quality (see below) . The development of the overall paradigm survey quality from both the total survey error perspective as well as the quality management sciences perspective, a mentioned by , has taken place mainly in official statistics and organizations and has been triggered by the rapid development of technology and other developments. Technological developments have largely improved the efficie

quality monitoring and control procedures, and has influenced potential quality dimensions like “accessibility, timel and coherence” . In addition, given the increased demands for harmonized and comparable survey statistics and con decision-making, it is essential to develop a quality framework that can accommodate all of these demands . Variou frameworks have been developed for this reason. See for more information on the development of the survey qualit paradigm and different frameworks. The framework adopted in this chapter for assuring and assessing quality is inf research on survey errors and costs and quality management, and highlights three aspects of quality: total survey err fitness for intended use (also known as “fitness for purpose”), and survey process quality . The three aspects of qua described in turn below: ***Total survey error*** The total survey error (TSE) paradigm is widely accepted as a conceptu framework for evaluating survey data quality . Errors in survey estimates consist of variances of estimates (reflectin estimate instability over conceptual replications) and systematic deviations from a target value ('biases'). TSE defin as the estimation and reduction of the mean squared error (MSE) of statistics of interest, which is the sum of randon (variance) and squared systematic errors (bias). The MSE for each individual statistic in a survey is not typically cal due to the following practical problems (see for detailed discussions). Firstly, MSE needs to be calculated differentl different survey parameters (e.g., the survey population mean and variance). It can also differ for each survey item. that a survey usually contains many items and parameters poses a challenge for the practical application of MSE. Se the true scores used in bias estimation are often unknown and are usually obtained from a benchmark survey, such a data, or 'gold standard' estimates, such as from a face-to-face survey, and the accuracy of these estimates is not guar Thirdly, given that MSE is often a combination of different error sources, it is sometimes difficult to distinguish and these error sources. These practical issues become more complicated in 3MC surveys, posing additional challenges use of MSE. Despite the challenges, however, the TSE framework helps organize and identify error sources and esti their relative magnitude, which can assist those planning 3MC surveys to evaluate design and implementation trade TSE takes into consideration both measurement (construct validity, measurement error, and processing error)—i.e., well survey questions measure the constructs of interest—as well as representation (coverage error, sampling error, nonresponse error, and adjustment error) —i.e., whether one can generalize to the target population using sample su data. In the TSE perspective, there may be cost/error tradeoffs; that is, there may be tension between reducing these and the cost of doing so. Although the TSE paradigm is increasingly used as an organizing framework in the design evaluation of single-country surveys , it is rarely cited in reference to 3MC research. offer a total survey error frame adapted and expanded from , , , and for 3MC survey research that integrates error sources with methodological and operational challenges that are unique to or may be more prominent in 3MC surveys (see Figure 1 below). It is impo note that like the framework proposed by , 's framework does not elaborate on the distinction between systematic an variable error discussed above for the sake of parsimony.

Figure 1.

(image) The following describes the main elements of 's TSE framework:

- The framework links error sources to the key stages of the survey process: design, implementation, and evaluati
- Part A of Figure 1 outlines representation error—including coverage error, sampling error, nonresponse error, a adjustment error—which are indicators of how well survey estimates generalize to the target population.
- Part B of Figure 1 encompasses measurement-related error—including validity, measurement error, and process —which are indicators of how well survey questions measure the constructs of interest.
- As denoted by the resulting “survey statistic” at the end of parts A and B, the framework produces statistic-spec profiles for representation and measurement errors for a single survey statistic. The framework produces statisti specific error profiles because the presence and scale of error may, and frequently does, vary across individual s statistics.
- The framework incorporates the dimensions of cost, burden, professionalism, ethics, and other design constrain frequently impose constraints on 3MC survey design and have an important influence on the quality of 3MC su

The framework includes the role of input and output harmonization, which are unique to 3MC surveys. Input and ou harmonization represent two general approaches to harmonization, which is a term for procedures aimed at achievin least improving, the comparability of different surveys. See Translation: Shared Language Harmonization for furthe discussion.

- “Comparison error”—a concept introduced by —is the conceptual error introduced across each component of a survey as well as the aggregate of error across all components, which could threaten comparability across surve
- For each error component (e.g., coverage error, sampling error, measurement error, etc.), key potential sources c are identified that may contribute to TSE in individual populations and may present particular challenges to standardizing design and implementation (or establishing suitable localized equivalents) across populations, the potentially increasing comparison error. See for a detailed discussion of key potential contributions to error and and implementation challenges across the main stages of the survey lifecycle.

With advances in computerized interviewing software and sample management systems, data related to quality incre can be collected with survey data, and can be used to measure various components of error. These include paradata (see Paradata and Other Auxiliary Data) , data from experiments embedded in a survey, and supplementary data suc nonresponse followup measures. Each of these facilitates evaluation of survey data in terms of TSE. ***Fitness for int use*** argue that the TSE framework lacks a user perspective, and that it should be supplemented by using a more moc quality paradigm—one that is multidimensional and focuses on criteria for assessing quality in terms of the degree t survey data meet user requirements ('fitness for intended use'). By focusing on fitness for intended use, study design to meet user requirements in terms of survey data accuracy and other dimensions of quality, such as comparability a timeliness. In this perspective, ensuring quality on one dimension (comparability) may conflict with ensuring quality another dimension (timeliness), and there may be tension between meeting user requirements and the associated cos doing so on one or more dimensions. There are a number of multidimensional quality frameworks in use across the (see, for example, , , , , and). Table 1 shows seven dimensions that are often used to assess the quality of national of statistics in terms of both survey error and fitness for use: comparability, relevance, accuracy, timeliness and punctu accessibility, interpretability, and coherence. In this framework, TSE may be viewed as being encompassed by the a dimension.

Table 1: Dimensions of quality.

Quality Dimension	Description
Comparability	Are the data from different countries or cultures comparable to each other (i.e., equivalent)?
Coherence	Do the data form a coherent body of information that can be rearranged or combined with other c
Relevance	Do the data meet the requirements of the client and users?
Accuracy	Are the data describing the phenomena that they were designed to measure; that is, are the survey estimates close to the true values of the population parameters they are meant to measure?
Timeliness and punctuality	How much time has elapsed between the end of the data collection and when the data are availab analysis? Are the data available when expected, based on client specifications?
Accessibility	Can users easily obtain and analyze the data?
Interpretability	Do the data make sense in terms of users’ hypotheses? Are supplementary data available to facili analysis: e.g., data that describe the major characteristics and structure of the data (metadata) as v data about the survey processes (paradata and other auxiliary data)?

Cost, burden, professionalism, and design constraints are factors that may also affect fitness for use on these dimer

- **Cost:** are monetary resources optimized?
- **Burden:** given the necessary information obtained, are interviewer and respondent burden minimized?
- **Professionalism:** are staff provided with clear behavioral guidelines and professional training, are there adequa provisions to ensure compliance with relevant laws, and is there demonstration that analyses and reporting have impartial? Note that the professionalism can vary significantly across countries, and tailored specifications and may be needed.

- **Design Constraints:** are there context-specific constraints on survey design that may have had an impact on qu example, use of a different mode of data collection in one culture than in others, or use of different sample fram between countries)?

The aim is to optimize costs, minimize burden, and recognize and document design constraints where appropriate, b the need to be sensitive to local survey contexts and to maximize professionalism. Figure 2 shows the dimensions o as well as those factors that affect quality in terms of fitness for use (see , , , , , and for examples of dimensions of q used by statistical agencies). It also shows the accuracy dimension in terms of TSE .

Figure 2: Fitness for intended use ('Quality' dimensions) and total survey error ('Accuracy' dimension).(imag

The dimensions of quality (comparability, coherence, relevance, accuracy, etc.) and factors that may have an impact quality (cost, burden, professionalism, and design constraints) apply to all surveys. However, in a 3MC context, cha increase:

- The quality dimensions of **coherence** and **comparability** are the *raison d'être* for cross-national and cross-cultu survey research. Fitness for intended use cannot be met without quality on these dimensions.
- **Relevance** may be harder to achieve in comparative research, in that decisions have to be made about what leve relevance to aim for with a standardized survey across many cultures and countries.
- **Accuracy** in terms of TSE may be difficult to estimate consistently across 3MC surveys.
- **Timeliness and punctuality** may be a challenge in 3MC research; for example, data collection may occur in va different climates or with varying organizational infrastructures (see Data Collection: General Considerations).
- **Accessibility** in the 3MC context can mean more than simply making survey data publicly available, particularl countries with fewer resources, where it may also be necessary to include capacity building or data user training the data truly accessible to local users. Country-level data access laws and regulations can also come into play (Dissemination).
- **Interpretability**.

Appendix A highlights recommendations from other guidelines in relation to dimensions of quality. ***Survey process*** Fitness for intended use provides a general framework for assessing the quality of 3MC surveys and defines the esse dimensions of quality, one of which is accuracy (i.e., TSE). A third approach to quality monitoring and assessment i process quality management and the notion of continuous process improvement . This approach focuses on quality a levels: the product, the process, and the organization . Product quality, as mentioned by , is the expected quality of s deliverables, which is often decided by the clients or the users. 'Process quality' refers to the quality of the process th generates the product. One way to monitor and control process quality is to choose, measure, and analyze process va relevant to the particular survey . However, process quality depends on the third level, organization quality, or the cl survey organization in each country—an important element of quality assurance and quality control in 3MC surveys mentioned by , without high-quality organizations, there may be insufficient resources to apply processes as specifie might lead to deviations from the specifications. Thus, product quality cannot be achieved without good process qua having good process quality requires a good organization that manages for quality. A focus on survey production pr quality requires the use of quality standards and the collection of standardized study metadata, question metadata, a process paradata . Figure 3 shows the elements of survey process quality management that allow users to assess the of processes throughout the survey lifecycle: quality assurance, quality control , and a quality profile or quality repo documents all that is known about the quality of a survey . The arrows in Figure 3 indicate that quality planning and assurance will guide the quality control process, and the latter will in turn influence the quality planning and assurar quality profile will reflect the quality control activities and will also make recommendations for quality improvemer which will be reflected in the future quality planning and assurance. These are discussed further in the guidelines be Data collection organizations involved in a 3MC survey may vary in what cost/quality tradeoffs they can make, as v the processes they generally monitor for quality purposes. However, if each organization reaches a minimum standa through adherence to the quality guidelines of the study's coordinating center (which monitors and oversees the 3M activities), the coordinating center can assess the quality of each survey based on quality indicators (paradata) from organization and create a quality profile that allows users to assess survey data quality and comparability across cult

Appendix B summarizes, for each set of guidelines, examples of elements of quality planning and assurance, quality monitoring and control, and a quality profile.

Figure 3: Survey process quality management.(image)

↑ Ba

Guidelines Goal: To ensure the quality of survey production processes and consequently the survey data throughou survey lifecycle, as well as clear and comprehensive documentation of study methodology, and to provide indicators process and data quality.

↑ Ba

1. Build a solid coordinating center. ***Rationale*** To minimize comparison error in 3MC surveys, survey designers d various guidelines and requirements for each step in the survey lifecycle. One might expect that providing such deta guidelines and requirements to participating countries would be sufficient, and that the countries would understand a follow the prescribed protocols closely. However, experience shows that this is often not the case. Countries can dev largely from the instructions, greatly jeopardizing comparability. One such example is the 1994 International Adult Survey (IALS) . The coordinating center did not perform any quality control programs to make sure that each count followed the instructions strictly. This led to various deviations from the original design, and one country had to be withdrawn from the study . The European Commission decided to improve future IALS by implementing standardiz procedures, including setting up a strong central infrastructure . Such infrastructure is essential for maintaining cour adherence to the survey instructions and requirements, and should be part of any quality assurance plan. In addition, 3MC surveys operate on an ongoing basis, wherein a central infrastructure is also needed to "plan, coordinate, suppo improve international survey endeavors" . See Study Design and Organizational Structure for further discussion on establishment of coordinating center. ***Procedural steps***

1.1 Clearly document the role and tasks of the coordinating center and the responsibilities of each country's coo in the quality management plan (see Guideline 2).

1.1.1 The tasks of the coordinating center include :

- Study design.
- Coordination with national bodies, as necessary.
- Development of specifications for processes and participating survey organizations.
- Providing instructions and support to each participating country.
- Implementing and supervising survey operations.
- Maintaining adherence to user demands and study design.
- Design of quality control procedures.
- Suggestions for future improvements.
- Documentation of survey process and results.

1.1.2 The responsibilities of the country or local coordinator include:

- Organizing scheduling.
- Communication with the coordinating center.
- Deliverables to and from the coordinating center, such as questionnaire designs (see Questionnaire Des

1.2 Set up the supporting system for the coordinating center. For example, the Central Coordinating Team (CC European Social Survey (ESS) is supported by a Scientific Advisory Board, as well as four Specialist Advisor Groups on question module design, methods, sampling, and translation .

1.3 Set up rules and routines for coordination, such as who the country coordinators should be (e.g., subject ma expert or survey manager), when to communicate and by what method(s) (e.g., email, telephone, video confe calls), and the contents of the deliverables.

1.3.1 If possible, appoint an experienced survey manager, instead of a subject matter specialist with minima experience, as a coordinator. As mentioned by , it is important that the coordinator be familiar with error structures associated with different survey operations and appreciate the need for quality assurance and c control.

Lessons learned

1.1 To pursue optimal comparability, the European Social Survey (ESS) has set up an infrastructure with a Cen Coordinating Team (CCT) at the center. This team receives feedback from national coordinators (NCs) in part countries and closely monitors adherence to survey instruction and requirements . At the design stages and du fieldwork, when there is need for ESS input, final decisions and specifications are made by the CTT . Figure 4 the organizational structure of the ESS.

Figure 4: Organizational structure of the ESS.

(image)

Source: ESS information brochure.

1.2 Few organizations have evaluated the infrastructure model they use. suggests that, given that many 3MC su still have very weak infrastructures for coordination and monitoring, evaluation studies on current infrastructu could eventually result in more efficient infrastructure formations.

↑ Ba

2. Develop a sustainable quality management plan. ***Rationale*** A sustainable quality management plan is essential developing planned, systematic quality assurance (Guideline 3) and quality control (Guideline 4) activities, which in helps ensure that the study and survey data meet client and user requirements. It also facilitates the development of a profile (Guideline 5), which should document survey methodology, key indicators of quality, lessons learned, and recommendations for improvement. ***Procedural steps***

2.1 Review available 3MC survey standards and best practices for ensuring the quality of survey processes, sur and documentation (such as these guidelines).

2.2 Review existing quality profiles (see Guideline 5) and lessons learned from other studies. Use standardized profiles and protocols to establish sustainable quality management.

2.3 Review study requirements for quality assurance (see Guideline 3) and quality control (see Guideline 4). Th be developed at the study design stage by the coordinating center, the survey organization, or both.

2.4 Review study goals and objectives, required products and deliverables, and study timeline and budget.

2.5 Review country-specific regulations and legislation relevant to conducting survey research.

2.6 Through analysis of the processes in the survey lifecycle—i.e., process analysis—identify characteristics of products (e.g., coded data) that could vary during the processes (e.g., verification failures) . For example:

2.6.1 Use tools to analyze a process to determine what steps in the process need to be monitored to ensure q and to identify quality indicators to monitor . Examples of tools used to analyze processes are:

- Cause-and-effect diagrams ('fishbone' diagrams).
- Flowcharts.

2.7 Identify key indicators of the quality of the product(s) of the process in terms of TSE and other dimensions quality, as well as factors such as cost, burden, and the risk of not meeting quality requirements. See Appendi examples of survey quality indicators as they relate to the TSE and fitness-for-use quality dimensions. Note th of the indicators are constructed using paradata and other auxiliary data such as survey time and keystroke dat Paradata and Other Auxiliary Data for more information.

2.7.1 If possible, use such indicators to determine whether the process is stable or controlled; that is, whethe variation on a key indicator is due to randomness alone. This can be done using paradata from similar stu organization has conducted or is conducting, or from pilot studies.

2.7.2 Define measurement and reporting requirements for use during quality assurance (see Guideline 3) an control (see Guideline 4), and determine who would be responsible for ensuring that quality assurance a quality control activities are carried out.

2.7.3 Assess whether these requirements can be met through current procedures and systems and with curre collected paradata; and if not, develop a process improvement plan.

2.7.4 Create cost/error tradeoff decision rules about how to alter the features of the study design if the goals met. For example, consider using responsive design, wherein researchers continually monitor selected pa to inform the cost/error tradeoff in real time, as the basis for altering design features during the course of collection or for subsequent waves (see Paradata and Other Auxiliary Data).

2.8 Use quality planning tools (see Appendix B) to help determine what performance analyses and assessments be used. Such tools include:

2.8.1 A **cost-benefit analysis** of potential quality management procedures and activities: evaluating their be relation to the cost of performing them relative to overall study costs.

2.8.2 **Benchmarking**: comparing planned activities and their outcomes against those of similar studies to fo basis for performance measurement.

2.8.3 Statistical analysis of factors that may influence indicators of process or product quality.

2.9 Develop a quality assurance plan, which could include (see Appendix B):

2.9.1 The process improvement plan.

2.9.2 Performance and product quality baselines.

2.9.3 Process checklists.

2.9.4 A training plan.

2.9.5 Recommended performance analyses and assessments (e.g., quality assurance procedures for verifying interviews and evaluating interviewer performance).

2.9.6 Required process quality audits, reviews, and inspections (e.g., a review of tapes of interviews to asse interviewer performance).

2.10 Develop a quality control plan for continuous monitoring of processes to ensure that they are stable and tha products are meeting requirements (see , Guideline 4, and Appendix B). Such a plan could include:

2.10.1 The process improvement plan.

2.10.2 Performance and product quality baselines.

2.10.3 Quality indicators identified in process analysis and planning for responsive design.

2.10.4 Performance analyses and assessments to use for monitoring processes.

2.10.5 Tools to use for monitoring processes and product quality (e.g., Pareto charts and statistical process co charts).

2.10.6 Reports to prepare on performance measurement, such as interviewer training certification. Interviewe behavior can be monitored and evaluated using paradata and other auxiliary data. See the Paradata and o Auxiliary Data chapter for more information.

2.11 Develop procedures to ensure that throughout the survey lifecycle all documentation, reports, and files relat quality planning and assurance, quality monitoring and control, and process improvement are retained. This fa preparing a quality profile for users of the disseminated survey data (see Guideline 5 and Data Dissemination

2.12 Develop procedures for updating the quality management plan as needed during the survey lifecycle.

Lessons learned

2.1 There are many quality management methodologies that survey organizations may use that focus on the thr of quality: product, process, and organization; for example, total quality management (TQM). Discussion of s methodologies is beyond the scope of this chapter, but experience has shown that they can help organizations for quality.

2.2 Developing a quality management plan alone does not necessarily guarantee quality. Other project manager practices may also affect quality. Many survey organizations and statistical agencies have recognized the valu adhering to professional project management guidelines, such as those of the and the International Project Management Association (IPMA). Many have certified project managers and follow professional project man best practices that may affect quality, schedule, and costs, such as developing risk management and communi plans. As with a quality management plan, these can be critical to ensuring the quality of processes and surve See Study Management for further discussion of the study management process.

↑ Ba

3. Perform quality assurance activities. ***Rationale*** Quality assurance is defined by the planned procedures and act (see Guideline 2) that an organization uses to ensure that the study meets process and product quality requirements; specifies ways in which quality can be measured. ***Procedural steps***

3.1 For each stage in the survey lifecycle, perform quality assurance activities as outlined in the quality manage plan. Appendix B includes quality assurance inputs and activities at each stage of the survey lifecycle. Some e include:

3.1.1 Certification by the coordinating center that an organization's study design and quality standards meet standards (see Study Design and Organizational Structure).

3.1.2 Pretest consent protocols and forms to ensure comprehension (see Ethical Considerations).

3.2 Perform performance and product quality assessments. Examples include:

3.2.1 Certification of interviewers after training (rate of certification, including after followup training); that based on evaluation of interviews (taped or monitored), determination that the interviewer is ready to wo the study. See Interviewer Recruitment, Selection, and Training for further discussion.

3.2.2 Verification of coded questionnaires (rate of verification failures).

3.3 Generate indicators of quality for each assessment, based on baselines established in quality planning (Guid and create reports on performance and quality assessments which can be used for both quality monitoring and (see Guideline 4) and documentation in a quality profile (see Guideline 5).

3.4 Perform quality audits at key points in the survey lifecycle. These are generally structured independent revi determine whether activities comply with study and organizational policies and procedures for managing qual are intended to identify inefficiencies in processes and to make recommendations for reducing the cost of qua management and increasing the quality of processes and products. In 3MC surveys, these generally would be each individual survey organization or an independent local auditor.

3.5 Provide documentation for the following aspects of quality assurance:

3.5.1 Performance and quality assessments.

3.5.2 Recommended corrective actions and corrective actions taken.

3.5.3 Updates to baselines.

3.5.4 Changes to the quality assurance plan.

↑ Ba

4. Perform quality control activities. ***Rationale*** To ensure that standards and requirements are met, it is necessary monitor study processes and the products produced against predetermined baselines and requirements and to contin evaluate whether processes are stable and quality requirements are being met . This may lead to recommendations f preventing or minimizing error or inefficiencies, updates to the quality management plan (see Guideline 2), and sug for improving standards and best practices. The result is a continuous process through improved quality assurance (s Guideline 3) and quality monitoring and control improvement . As indicated in Figure 3, quality control is closely li quality assurance, and the outputs of each feed into the other. ***Procedural steps***

4.1 Perform quality monitoring and control activities as outlined in the quality management plan, such as (see A A for examples):

4.1.1 Monitor process quality indicators (see Guideline 2).

4.1.2 Analyze and report on results of quality assurance activities, such as interviewer training certification, entry verification, checking that a process met specifications, etc.

4.1.3 In accordance with the quality management plan (see Guideline 2), generate charts and graphs to mon processes. Examples of such tools are:

- Pareto chart.
- Statistical process control chart.

4.2 Perform process analysis if quality requirements are not being met (see Guideline 2). For example, the Euro Social Survey (ESS) closely monitors the survey process and collects paradata and other types of auxiliary da contact forms.

4.3 Determine whether there is a need to:

4.3.1 Recommend corrective actions.

4.3.2 Modify the process improvement plan.

4.3.3 Modify the quality management plan.

4.4 Provide documentation for the following aspects of quality control:

4.4.1 Performance and quality assessments.

4.4.2 Recommended corrective actions and corrective actions taken.

4.4.3 Updates to baselines.

4.4.4 Changes to the quality management and quality assurance plans.

Lessons learned

4.1 Some organizations have used quality control techniques to monitor survey data collection processes and ac study designs when quality goals are not met. This is known as 'adaptive' or 'responsive' survey design . For e the National Survey of Family Growth (NSFG) uses paradata collected by interviewers to make judgments ab likelihood that individual sample cases will become respondents. By building predictive response propensity using paradata, it is possible to estimate the probability that the next call on a sample case will produce an inte Such information is used in a responsive design framework to reduce nonresponse in NSFG . See also Data Collection: General Considerations for further discussion on responsive design.

4.2 The European Social Survey (ESS) has developed a solid and continuously improving machinery for planni implementing the survey . It closely monitors the survey process, collects various types of paradata and other data using contact forms , and documents the paradata for each wave of the survey. As mentioned by , recent discussions on quality control of the ESS have concerned the issue of more timely interventions when countri implementation problems.

↑ Ba

5. Create a quality profile. ***Rationale*** A quality profile (also known as a quality report) synthesizes information fro sources, documenting survey methodology used throughout the survey lifecycle and providing indicators of process quality (sampling and nonsampling errors), corrective actions taken, lessons learned, and recommendations for impr and further research. It provides the user with all information available to help assess data quality in terms of fitness intended use, total survey error, and other factors discussed in this set of guidelines. See for an example of guideline such reports, , and the for examples of quality profiles, and Appendix A for examples from other sections of these guidelines. ***Procedural steps***

5.1 Document procedures and methodology used for key stages or processes in the lifecycle (see Appendix B). example, for sample design this would include:

5.1.1 Time dimension of design (e.g., one-time cross-sectional, fixed or rotating panel).

5.1.2 Target and survey population definitions, including inclusion/exclusion criteria.

5.1.3 Sampling frame(s) descriptions.

5.1.4 Maps and protocol used in field listing.

5.1.5 Description of all stages of selection, including sample sizes, stratification, clustering, oversampling, a number of replicates fielded at each stage.

5.1.6 Documentation of procedures to determine probabilities of selection and weights for each stage of sele

5.1.7 Tables of the precision of the estimates of key survey statistics.

5.1.8 (If necessary) descriptions of substitution procedures.

For each process documented, this should include:

5.1.9 Quality assurance procedures.

5.1.10 Quality control procedures.

5.1.11 Corrective actions taken.

5.2 Provide key indicators of quality for all dimensions of quality (see and Appendix A), some of which can be collected during data collections, others afterwards. They include:

5.2.1 Comparability.

5.2.2 Coherence.

5.2.3 Relevance.

5.2.4 Accuracy (see Quality Framework), including:

- Measurement error.
- Processing error.
- Coverage error.
- Sampling error.
- Nonresponse error.
- Adjustment error.

5.2.5 Timeliness and punctuality.

5.2.6 Accessibility.

5.2.7 Interpretability.

5.3 Document lessons learned and make recommendations for improvement in studies of the same design, and possible, make recommendations for methodological research that could inform the design of similar studies i future. Such information would be useful for the study's coordinating center and national survey agencies, as for researchers and organizations interested in conducting similar studies.

Lessons learned

5.1 The ESS provides a well-documented quality report, which includes fieldwork procedures, fieldwork result analysis of different error sources.

5.2 In 3MC surveys, a quality profile is often created for each study location. For example, the Survey of Healt Ageing and Retirement in Europe (SHARE) Compliance Profiles documented a set of quality control indicatc which each country is evaluated . discuss pilot testing the SHARE Quality Profile.

↑ Ba

References

{2265844:7JSSADDV};{2265844:7JSSADDV};{2265844:DUHNMIAC};{2265844:AELZ9PM9};
{2265844:DUHNMIAC};{2265844:83L45ASH};{2265844:M8ZJBZXV},{2265844:9UF9QU9P};{2265844:9UF9
{2265844:9UF9QU9P};{2265844:9UF9QU9P};{2265844:9UF9QU9P};{2265844:9UF9QU9P};{2265844:YHPXI
{2265844:DDYLNLET};{2265844:IRZVGYKZ};{2265844:83L45ASH};{2265844:M8ZJBZXV},{2265844:HQ5
{2265844:8XNZHEFA};{2265844:MT8VJDDI},{2265844:C5MQDRAC};{2265844:LV7WC8P2};
{2265844:DDYLNLET};{2265844:IC9CKU2Y};{2265844:BWMUUHCE};{2265844:DDYLNLET};
{2265844:8X5QJLMK};{2265844:RCK4HJVV};{2265844:725B7UKH};{2265844:DDYLNLET};
{2265844:BWMUUHCE};{2265844:BWMUUHCE};{2265844:PCAPN7RJ};{2265844:BWMUUHCE};
{2265844:M8ZJBZXV},{2265844:4Q62UKZ4};{2265844:M8ZJBZXV};{2265844:4Q62UKZ4};
{2265844:WHGN7GEP};{2265844:TA2F7VS4};{2265844:L2Z9EQGG};{2265844:EGZVFVPH};
{2265844:SZLZ9L4Y};{2265844:4Q62UKZ4};{2265844:WHGN7GEP};{2265844:TA2F7VS4};{2265844:L2Z9I
{2265844:EGZVFVPH};{2265844:MT8VJDDI},{2265844:YHPXI3LA},{2265844:DDYLNLET};
{2265844:DDYLNLET};{2265844:7JSSADDV};{2265844:DUHNMIAC};{2265844:DUHNMIAC};
{2265844:DUHNMIAC};{2265844:WHGN7GEP};{2265844:DUHNMIAC},{2265844:7JSSADDV};
{2265844:M8ZJBZXV},{2265844:FXB89GFX};{2265844:8L5B46G9},{2265844:BWMUUHCE};
{2265844:2QXU9JUZ};{2265844:4WJ8W22P};{2265844:DUHNMIAC};{2265844:DUHNMIAC};
{2265844:DUHNMIAC};{2265844:DUHNMIAC};{2265844:DUHNMIAC};{2265844:K8PJV7RT};
{2265844:DUHNMIAC};{2265844:KW4B3BHI};{2265844:KW4B3BHI};{2265844:KW4B3BHI};
{2265844:AG24EJQB};{2265844:M8ZJBZXV},{2265844:DUHNMIAC};{2265844:M8ZJBZXV},
{2265844:DUHNMIAC},{2265844:8XNZHEFA};{2265844:KW4B3BHI};{2265844:IE24SDS2};{2265844:IE24S
{2265844:BWMUUHCE};{2265844:K8PJV7RT};{2265844:BWMUUHCE};{2265844:IRZVGYKZ};
{2265844:NPV4W9H3},{2265844:FXB89GFX};{2265844:G3JB5KF5};{2265844:IRZVGYKZ};{2265844:R3YI
{2265844:ESSRTE6L} apa creator asc 0 26

↑ Ba