

SRO Quality Control



QC Lunch & Learn Series

1. Overview of QC at SRO – Monday, April 19 - 12:00 noon

This session will introduce you to the QC Implementation Team, quality control philosophy, and will provide an overview of quality control processes for interviewer-administered data collection at SRO.

1. QC Technical Systems and Tools – Thursday, May 6 - 12:00 noon

This session will introduce the technical systems and quality control tools used for recording interviews, completing evaluations and verifications, and reporting QC results.

- **1. Measuring and Modifying Interviewer Behavior** Thursday, May 20 12:00 noon This session will show how we measure interviewer behavior, adherence to standardized interview protocols, and how we provide evaluation feedback and training to interviewers.
 - 1. Project Considerations Related to QC Monday, June 14 12:00 noon

This session will discuss a variety of issues for projects to consider, including budgeting for QC, selecting the material to evaluate, alternative verification methods, handling possible falsification, and IRB issues related to QC.



Agenda

- What is Quality Control?
 - Evaluation
 - Verification
- Brief introduction to the SRO QC Implementation Team
- Quality Control process
- Overview of QC roles
- Working with QC Implementation Team



"The quality of a survey is best judged not by its size, scope, or prominence, but by how much attention is given to [preventing, measuring and] dealing with the many important problems that can arise."

--"What is a Survey?", American Statistical Association



What is QC at SRO?

- Evaluation of recorded intervieweradministered interviews
 - Adherence to general interviewing techniques (GIT)
 - Adherence to study protocols
- Feedback and training to interviewers
- Verification of completed intervieweradministered interviews



Goals of QC Process

- Ensure high quality data key to our integrity as a research organization
- Help our interviewers be successful data collectors
 - Requires a complex set of skills
- Identify question difficulties or screen design problems
- Help us to design our trainings better



QC Implementation Team

Grant Benson
David Bolt
Sarah Broumand
Gina Cheung
Sarah Crane
Larry Daher
Lloyd Hemingway

Margaret Hudson
Shonda Kruger-Ndiaye
Lisa Lewandowski-Romps
Elizabeth Ohryn
Gregg Peterson
Andrea Sims



QC Implementation Team Objectives

- Support individual projects in meeting their quality control needs related to interviewer-administered data collection.
- Develop best practices for the assessment of interview quality.
- Develop technical systems for the assessment of interview quality.
- Measure and reduce the potential errors that result from variation in interviewer behavior.



Quality Control Philosophy

- Total Survey Error (TSE) framework
 - Measurement Error vs Errors of Representation
 - Interviewer as a source of measurement error
 - Standardization is primary tool for minimizing error
 - Measure adherence to rules of standardization
 - Intervention intended to improve performance
- Fitness for Use framework
 - Utility of data and how data are used
 - Costs/resources required for implementation



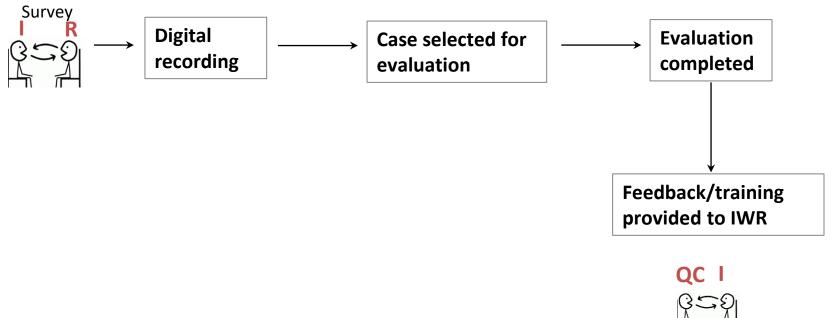
Quality Control Philosophy (con't)

- Primary objective is to provide constructive feedback to interviewers about their performance
- Organizational objective is to create quality indicators that can be compared over time and across projects
- Needs of individual projects must be taken into account
- Principles of quantitative data collection should be applied to the collection of evaluation data



Evaluation

QC Evaluation Process





RESEARCH OPERATIONS Recording Protocols for Data

Collection

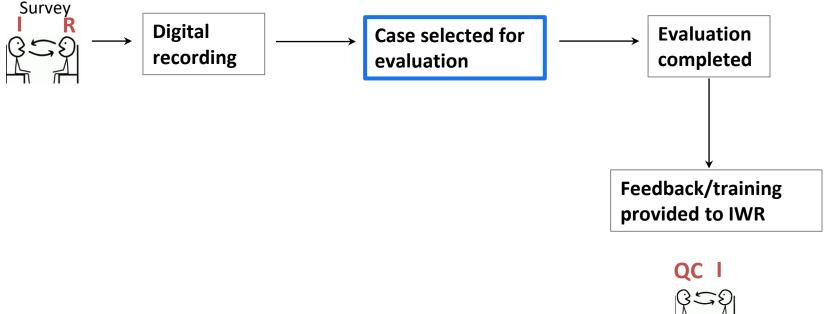
- Recommendation: Record 100% of all interviews
- In the absence of recording all interviews:
 - Identify ("flag") cases to be recorded for evaluation
 - Each iwer should have at least 1 early iw recorded for evaluation
 - Iws should be flagged for recording throughout the entire production period (random)
 - Flagging for recording should be informed by evaluation outcomes
- Consent to record should be requested of all respondents



Recording Protocols (Con't)

- In the absence recording 100% of IW content, create an evaluation "capture list"
- Capture list contains portions of the interview to record
- Capture list should include:
 - Asking of consent to record the interview
 - Minimum level of instrument content
 - Some questions that require only standard GIT
 - Some questions of special project interest
 - Primarily composed of questions asked of all Rs
- Ideally the capture list is varied during data collection

QC Evaluation Process

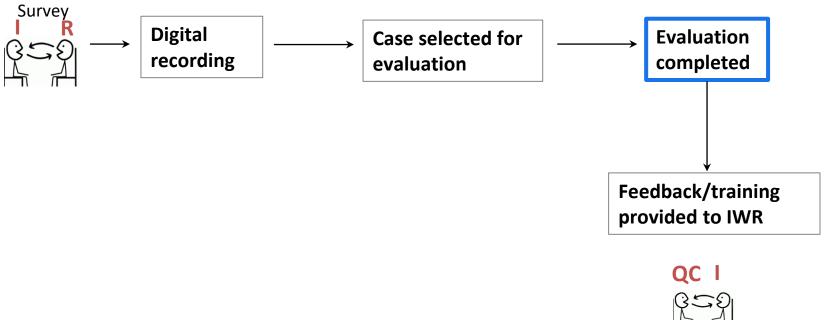




Selection of Cases for Evaluation

- Initial cases: initial interviews taken on a project should selected for evaluation.
 - Additional "initial" interviews for first non-English language IWs
- Random cases: cases for evaluation are randomly selected
- Paradata cases: selection of cases can be informed by other interviewer performance indicators (e.g., past performance, quality indicators, etc.)
- Additional cases can be selected by project staff or evaluators with the approved protocol.
- At least 5% of each interviewer's completed CAI instruments should be evaluated

QC Evaluation Process





Evaluating Cases

- Identify portions of the IW to evaluate ("evaluation list")
 - Some questions that require only standard
 GIT
 - Some questions of special project interest
 - Primarily composed of questions asked of all Rs



Measurement of Interviewer Behaviors

- Evaluation measures interviewer adherence to GIT and study-specific rules
- Objective and clearly defined measurement
- Measurement occurs at the question level
- Measurement occurs at the session level



Measurement of Behaviors (con't)





The ISR On-Line Interviewer Verification and Evaluation is available to authorized staff of the Institute for Social Research.



Measurement of Behaviors (con't)

- Note deviations from standards/protocols
- Note positive actions
- Provide written summary feedback

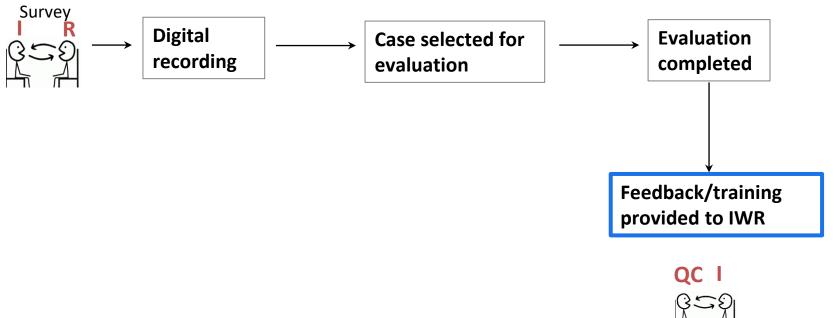


Reporting of Data

- Standard reports provide information for QC production operations and monitoring of Interviewer QC outcomes
- Developed for a variety of user groups with various levels of data
 - Provide point-in-time estimates, cumulative results and trends
- Integrate with SRO sample manager timekeeping data to assess production cost/effort associated with QC



QC Evaluation Process





Feedback to Interviewers

- Feedback/coaching/retraining is an extension of interviewer training
- Aim to provide feedback as soon as possible after an evaluation is completed
- Feedback should be provided on a regular basis to all interviewers
- Feedback should be provided more frequently when interviewers exhibit difficulty with the interview
- Feedback should be provided in both written and verbal formats
- Verbal feedback is provided by a team of specialists following retraining protocols in delivery of feedback.



Analysis of Interviewer Evaluation Data

Evaluation of Performance Data

- · Analysis results should help identify deviations from standard, interviewer protocol
- Analyses should include common, interviewer performance indicators (where possible) to permit comparisons across projects or over time

Evaluation of QC System Data

- Analyses should support data driven decisions related to:
 - Potential enhancements/modifications to QC data system and/or case selection
 - Interviewer/evaluator training
 - Testing of hypotheses generated through iterative analytic results sharing/discussion with QC team.

Guiding Principles:

- To the extent possible, principles of statistics and research methodology should be applied to analysis of evaluation data, including:
 - Documentation of limiting factors (e.g., variation in protocols, case sampling) when translating inferences to QC action plans
 - Emphasis on results at the project, group or aggregate-individual level
- Presentation of results in a format that is understood by multiple users



Verification



Verification Protocols

- Prevent falsification, deterrent
- Discover cases of data falsification
- Ensure the integrity and professionalism of the interviewer



Verification Protocols (con't)

- Attempt to contact a percentage of completed interviews/screeners shortly after completion
- Standardize scoring based on responses to key items in the instruments (Iw/screener and Ver questionnaires)
- Standardize thresholds for follow up actions
- Increase the number of cases to verify where data falsification is suspected
- Also use recordings when available for verification in cases of suspected falsification



Verification

- Telephone follow up conducted by GIT-trained interviewers
- MSMS instrument
 - 6 questions are standard across projects (although they can be removed if not applicable)
 - Up to 4 questions identified by the project
 - $\overline{}$ Four slots are available, but 2-3 study specifics are the norm.
 - These should be questions that everyone receives and that are not opinion questions.
- Adjudication completed in OLIVE



QC Operations



QC Roles

- SRO QC Implementation Team
- QC Management
 - Evaluators
 - Retrainers
- Verification Management
 - Verification team
- QC Technical Coordinator
- Project Team
 - Project QC Coordinator



QC Roles QC Implementation Team

- Support & advise projects
- Manage development of QC technical systems
- Establish & maintain best practices



QC Roles QC Management

- Oversee evaluator and retraining teams staffing and training
- Initial work with project teams to establish QC plan
- Support QC Coordinators



QC Roles

Verification Management

- Oversee verification team staffing and training
- Liaise with tech team to set up & test verification project



QC Roles QC Technical Coordinator

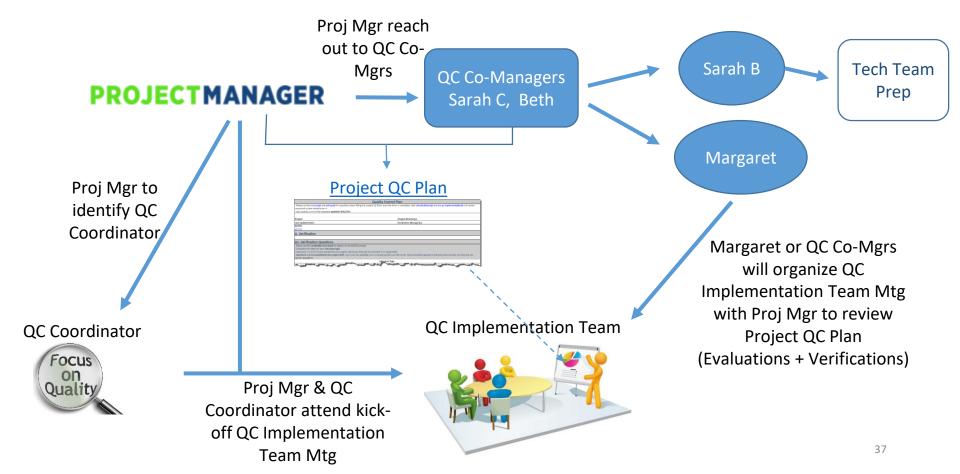
- Technical support of QC systems
- Set up and implement technical requirements for new projects
 - Flagging rules and case prioritization
 - Evaluation lists
- Set up standard reports
- Work with project data managers



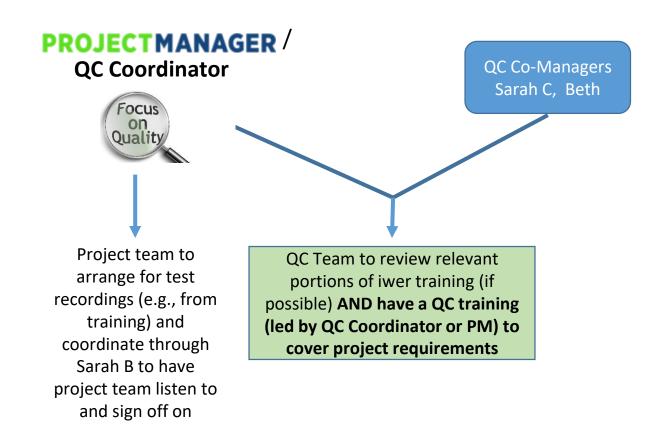
QC Roles QC Coordinator

- Member of the project team, typically PM
- Liaison across groups: project team, production management, interviewers, evaluators and retrainers, QC management, QC implementation team
- Monitor reports
- Decision maker!

QC Implementation Process: Initiation



QC Implementation Process: Training



recordings



QC Implementation Process: Implementation

Verification Lloyd Hemingway

- Ensure cases are getting imported into MSMS module
- Staff verification calling
- Track verification rates
- Coordinate with QC
 Coordinator on potential problems / failed
 verifications

Evaluation QC Coordinator, QC Co-Managers Sarah Crane & Elizabeth Ohryn

- QC Co-Managers oversee evaluator and retraining teams staffing and training
- QC Co-Managers will arrange for at least 1 inter-rater reliability session ~4-6 weeks into data collection
- QC Coordinator to review project significant errors
- QC Coordinator to work with Project Manager to review error rates, evaluation list and bring proposed concerns and changes to the QC Implementation Team

Systems & Reporting Sarah Broumand

- Set up standardized reports
- Work with data manager to ensure that recordings are getting loaded
- Coordinate implementation of capture list changes and evaluation rate changes



Questions?



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