# Use of CARI to Evaluate Telephone and Field Interviewer Performance

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# Overview of Presentation

- Quality monitoring at RTI
  - Use of CARI
  - Investments in quality monitoring
  - Audio capture in telephone and field environments
  - Sampling and monitoring protocols
  - Standardized interviewer performance evaluation
  - Performance feedback delivery
  - Impact of CARI on data quality

- Brief demonstration of RTI's Quality Evaluation System

# Quality Monitoring at RTI

- Interviewer performance monitoring is an important QC process
  - Considerable effort spent to ensure interviewers follow survey protocols accurately and consistently
- CARI practical for recording interviews, monitoring quality
  - Offers significantly improved data for interview authentication and monitoring of interview quality & interviewer performance
- RTI's Quality Evaluation System—QUEST—uses a standardized protocol, coupled with CARI technology, for quality monitoring of phone and field surveys

# Advantages of CARI:

- Improved interviewer feedback

- Monitoring of survey item performance

- Ability to monitor more (perhaps all) interviews

- Reduced/eliminated costs associated with verification interviews and observations

# Other Monitoring Methods

- Other monitoring processes used for projects that do not utilize CARI or in addition to CARI
  - Telephone verification interviews
    - Used for CARI refusal cases to authenticate interview and evaluate interviewer performance
  - Field observations
  - Data quality reviews (e.g., interview timing data, data frequencies)

# Deficiencies in Traditional Monitoring Methods

- Telephone interview monitoring
  - Traditional approaches (e.g., silent monitoring) inefficient; monitors spend unproductive time searching for respondent engagements to evaluate
  - Feedback on voice quality (critical for gaining cooperation by phone) hard to provide without audio recordings

- Field interview monitoring
  - Direct field observations, telephone verification interviews, and re-interview methods expensive
  - Missing phone numbers limit verification options

# Investments in Quality Monitoring

- RTI has made significant investments in quality monitoring systems and protocols to:
  - Increase use of CARI technology to evaluate and improve interviewer performance
  - Standardize monitoring protocols, metrics, feedback mechanisms
    - Uniform monitoring methodologies across modes
  - Increase efficiency of monitoring operations
  - Collect trend data to evaluate interviewer and survey item-level performance
  - Collect data to evaluate inter-rater reliability among monitors
  - Improve access to interview data by internal and external clients
- QUEST developed as a result of these initiatives

# Capture of Recordings - Field

- Field projects typically record pre-defined set of questions within CAPI instrument
  - Can be individual question, or series of related items
  - Often targets key analytic variables, new items, particularly challenging question series, key routing points
  - May also include informed consent, incentive payment scripts
- Internal recording technology controlled by instructions embedded in CAPI software
- Sound files created on hard drive, then compressed, encrypted, returned with other data
- Respondent permission to audio record required during informed consent

# Capture of Recordings – Call Center

- 100% of calls recorded via RTI's phone system
  - Includes non-interview calls (e.g., screenings, appointments, break-offs, refusals)
  - Files secured, sampled for monitoring, then ultimately purged
- IRB-approved protocol for informing all respondents that call may be monitored or recorded for QC purposes
- Digitized voices stored as audio files on server for later review via QUEST
- Audio files delivered by VOIP system through script triggered by end of telephone call

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# General Sampling / Monitoring Protocol

- 10% random sample of completed interviews monitored via recordings
  - Includes first 2 completed interviews for each interviewer
  - Approx. 12 minutes of recorded monitoring per case
- Live ("Silent") monitoring used for small percentage of non-interviews to monitor coding dispositions and other interviewer-respondent interactions
  - Approx. 6 minutes of non-interview calls; 12 minutes of live interviews

# General Sampling / Monitoring Protocol (Con't.)

- Priority given to interviewers with low scores or those not recently monitored

- Sampling/Monitoring rates adjusted as needed for individuals or project
  - In cases of suspected falsification or short-cutting, egregious errors, patterns of poor performance
  - Common problems across interviewers on a given project
  - Project desires increased monitoring

- Standardized reports support monitor production oversight and inform monitoring decisions

# Monitoring Options for Telephone Projects

- Telephone interviewers monitored "live" or via both recorded and live monitoring
  - Clients may request no recording if highly sensitive survey topics
  - All projects with recorded monitoring also have live monitoring of non-contact/non-interview interactions
- Recorded sessions primarily focus on completed interviews
- "Live" sessions may include multiple cases with varying outcomes
  - Session is time-based
  - Can involve multiple calls for the same interviewer

# Standardized Monitoring via QUEST

- QUEST targets comprehensive set of interviewer skills and behaviors critical to success of both phone and field studies

- Monitoring system supports:
  - Live and recorded monitoring
  - Monitoring of less traditional data collection tasks (e.g., Help Desk, missing data retrieval)
  - Monitoring of conversational and conventional (verbatim) interviewing
  - Inter-rater reliability assessment for monitors
  - Internal/external client review via secure monitoring portal
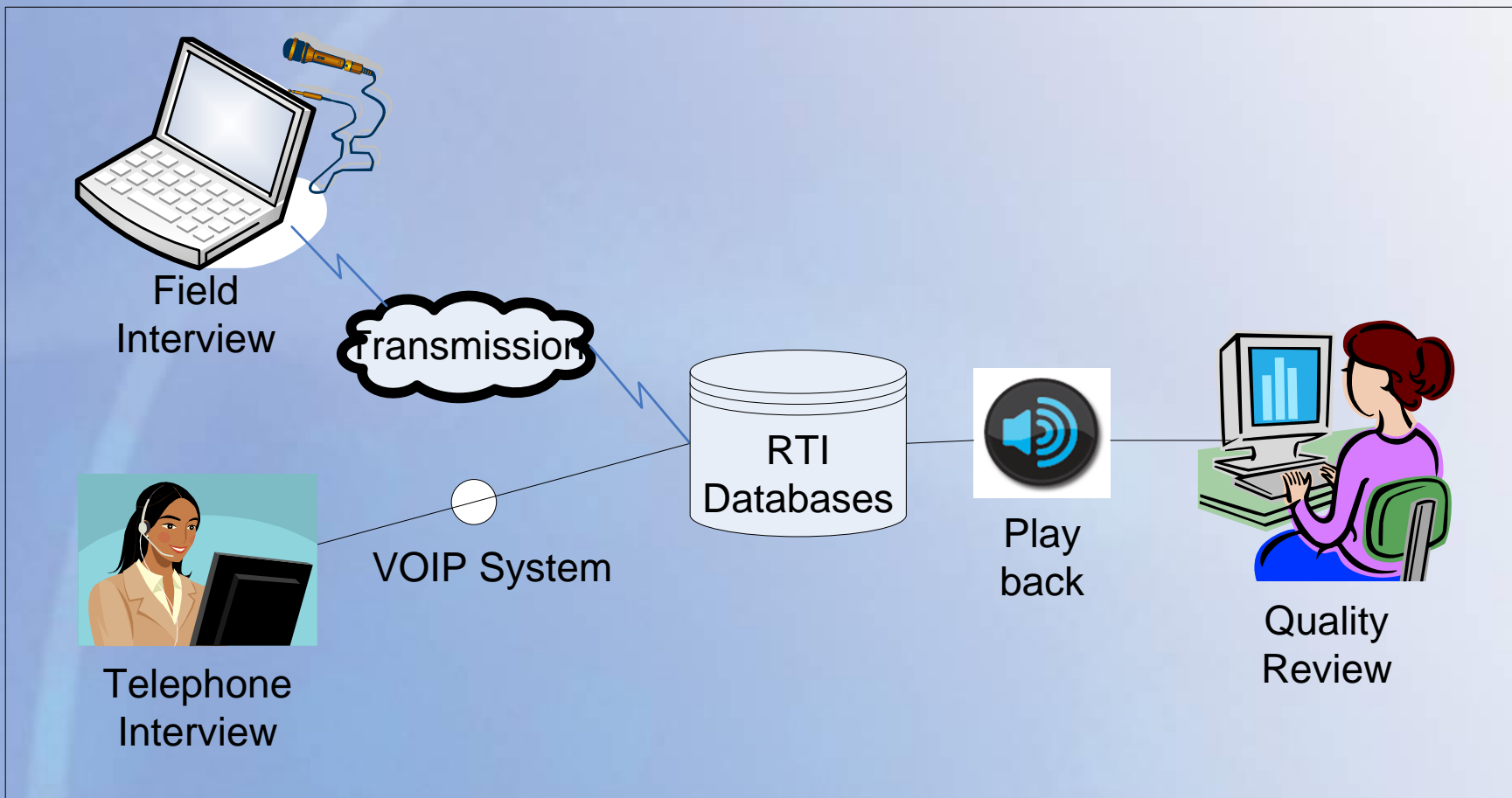
# Benefits of QUEST

- Provides more efficient, mode-independent approach for monitoring

- Yields data that…

  - Improve the quality of survey questions, survey data, interviewer training programs, and interviewer performance

  - Help detect common interviewer problems, including "drift" or decline in skills over time

  - Inform hiring and training practices for interviewers

# QUEST Performance Evaluation Protocol

- Utilizes standardized evaluation form, scoring criteria, and performance tracking & feedback process
  - Collects frequency of each observed behavior
  - Evaluation items weighted for scoring
  - All audio files for sampled case available during monitoring session
- Interviewers rated by performance dimension (e.g., Probing Skills) and overall
  - Focus is primarily on negative behaviors but some "exceptional" (positive) behaviors noted
  - Supervisor review mandated for some critical behavior observations
- Reports provide results by interviewer, supervisor, project
  - Trend and cross-project, cross-mode analyses possible

# QUEST Performance Dimensions

Interviewers evaluated on:

- Authenticity
- Case Management Skills
- Initial Contact
- Keying Skills
- Reading Skills (Conversational & Conventional)
- Probing Skills

- Feedback Skills
- Presentation Skills
- Professional Behavior
- Interview Protocol
- Recontact/Missing Data Retrieval
- Exceptional Behavior

# Sample QUEST Evaluation Block

| PROBING | ITEM SCORING CATEGORY |
|---|---|
| Vague/Inappropriate answers ignored | CR |
| DK or RE response not probed (critical item) | CR |
| DK or RE response not probed (non-critical item) | NC |
| Leading/non-neutral probe used | CR |
| Insufficient probing to reach codeable response (critical item) | CR |
| Insufficient probing to reach codeable response (non-critical item) | NC |
| Inconsistent interpretation/clarification given | CR |

**The Probing block, standardized across phone and field studies, evaluates how well interviewers handle vague, insufficient, or DK/RE responses. All Evaluation Form items are weighted as NC (non-critical), CR (critical), or XCR (extremely critical).**

# Conventional vs. "Conversational" Interviewing

## Reading Skills:
### Conventional Interviewing

- Articulation unclear
- Pronunciation incorrect
- Major unscripted word/phrase added
- Minor unscripted word/phrase added
- Major word/phrase omitted
- Minor word/phrase omitted
- Response categories not read when required
- Entire question/instruction omitted

## Reading Skills:
### Conversational Interviewing

- Articulation unclear
- Pronunciation incorrect
- Conversational interviewing not used or used incorrectly
- Key question element omitted
- Inappropriate/Overuse of paraphrasing
- Entire question/instruction omitted
- Did not use proper grammar

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# Standardized Scoring Algorithm

- QUEST assigns score to each evaluation form block (e.g., Probing) and to overall monitoring session
  - Block-level scores based on number and "criticality" of observed errors
  - Overall session scores based on block-level scores and total error count, while accounting for any "exceptional" interviewer behaviors

| Block-level Scores | Overall Session Scores |
|---|---|
| Did not consider | Did not meet expectations |
| No errors | Met expectations |
| Some errors | Exceeded expectations |
| Excessive errors | |

# Feedback Delivery

**Field Projects:**

- Monitoring results provided via standard reports to field supervisors

- Feedback given to interviewers by field supervisors

**Telephone Projects:**

- Monitors deliver feedback directly

- Feedback given immediately if interviewer is present, else during next work shift

# Impact of CARI on Data Quality

- Increased efficiency, particularly in Call Center
- Enhanced feedback on interviewer performance
  - Constructive feedback and reinforcement of positive behaviors
  - Targeted retraining of individual interviewers and identification of common problems or "drift" in skills over time
  - Preference for recorded monitoring given audio playback option
- Improved quality of interviewer training programs
  - E.g., recordings used in certification process
- Improved quality of survey questions and survey data
- Greater ease/frequency of project & client monitoring
- Quality management simplified via standardized reports

# Brief Demonstration of RTI's QUEST System

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