Quality in questionnaire development for a rapid online panel survey

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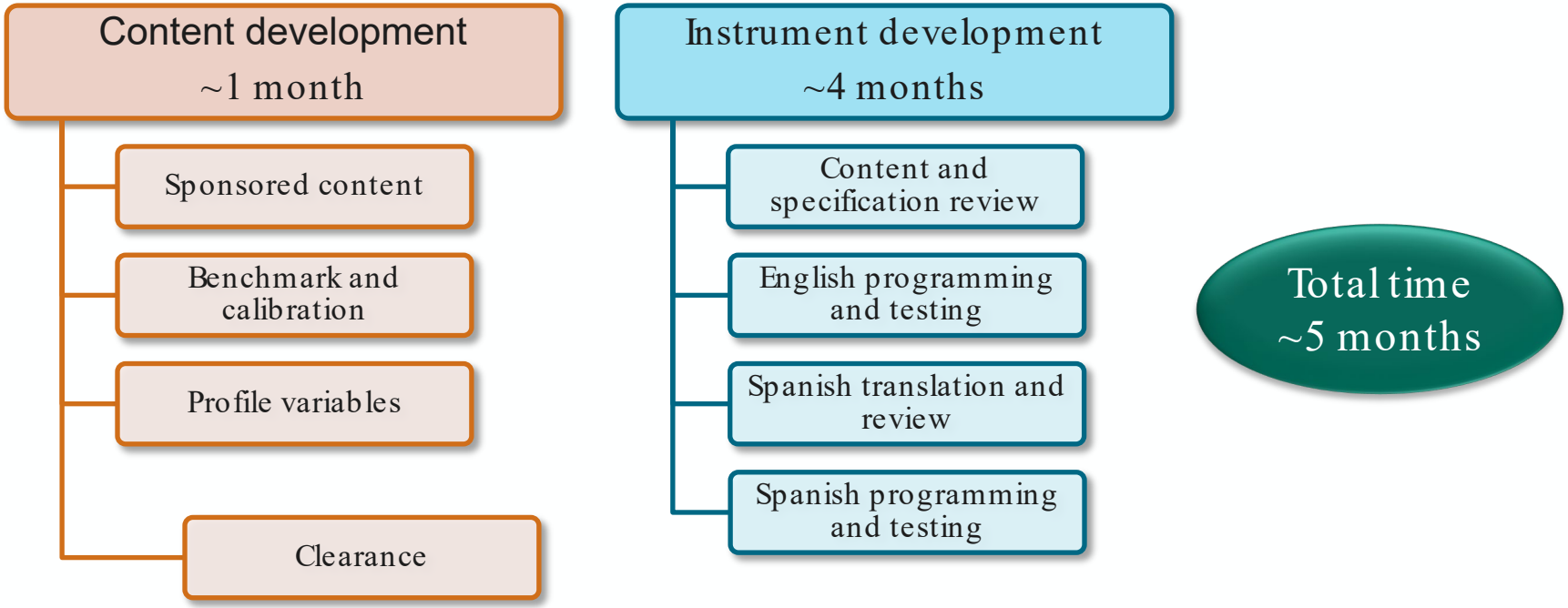
Overview

- **Rapid Surveys System Background**
- **Rapid Surveys Pre-Data Collection Activities**
- **The Foundation for Data Quality**
- **Content and Instrument Development**
  - Challenges
  - What worked
  - How we made it work

Rapid Surveys System Background

- **Two panels: KnowledgePanel and AmeriSpeak**
- **Three contractors: Ipsos, NORC, RTI**
- **Two modes: CAWI and CATI**
- **Omnibus health topic survey**
  - 20 minutes (~160 questions)
  - Half sponsored content
  - Half content for benchmarking and weight calibration

Rapid Surveys Pre-Data Collection Activities



The Foundation for Data Quality

- Clear and meaningful questions
- Appropriate weighting for nationally-representative data
- Free of errors

➢Compressed timeline

How to apply total survey quality framework for the best results given constraints?

The Foundation for Data Quality

- **Work closely with sponsors throughout the survey cycle**
- **Communicate with other project staff early and often**
- **Consider where additional time or effort early in the process can help:**
  - Prevent delays downstream
  - Avoid errors that would cause embarrassment or reduce trust
- **Adapt round-by-round to improve communication and management**

Content Development

Rapid Surveys Content Development

Sponsored content:

- **Requested by CDC and other federal partners**
- **Addresses specific research needs**
- **Collaboratively developed**
  - CDC subject matter experts
  - NCHS survey methodologists

Benchmark and calibration content:

- **Used for weighting and quality assessment**
- **Matches current/recent NHIS item wording**
- **Selected by sampling and weighting team**
  - Input from question design team
- **Includes panel profile data**

Rapid Surveys Topics Rounds 1-6

Family Health History

Alcohol and Cancer Risk

Sunscreen Safety

Technology-Facilitated Sexual Violence

Swimming

Genetic Testing Privacy

Online Connectedness

Employment

Contraception Access Among Women of Reproductive Ages

Intimate Partner Violence

Positive Childhood Experience

Stroke Awareness

Produce Prescription Programs

Home Ventilation

Genetic Testing for Cancer and Heart Disease

Medical Procedures – Fallopian Tubes and Ovaries

SPD 15: Race/ Ethnicity

Sexual Health

Chronic Wasting Disease in Deer and Elk

Childhood Vaccinations

Illegal Drug Use and Naloxone Awareness

Suicide

Hearing Protection Fit Testing

Exposure to Chemical Straighteners, Relaxers, or Pressing Products

HPV Infection Self Collection

Chronic Pain

Long COVID

Cancer Screening - Breast Density

ADHD

What challenges have we encountered?

- **Subjective measures**
  - Difficult to assess measurement error
- **Wide range of niche topics**
  - May be unfamiliar to respondents
  - Need input from subject matter experts
- **No time for pre-testing**

What has worked well?

- **Iterative, collaborative development process**
  - Frequent meetings with sponsors
  - Sponsors review multiple drafts
  - Input from NCHS methodologists
- **Benefits:**
  - Appropriate concept specification
  - Fit-for-purpose data
  - Fewer changes during instrument development
  - Smoother analysis process

How do we make this approach work?

- **Collaborative processes can easily run over schedule**

- **Flexibility and upfront communication:**
  - Smaller groups for quicker meetings
  - Forecast scheduling concerns for sponsors
  - Mix of formal and informal communication

- **Adapt schedule based on previous rounds**
  - Buffer period

Clearance Processes and Federal Standards

- **New clearance request describing the RSS data collection system**
  - Usual 60-day and 30-day notices

- **For each round:**
  - 30-day Federal Register Notice announcing each new survey
  - Advance brief to OMB regarding how each new survey is consistent with the four considerations for adding questions
  - Each survey instrument submitted to OMB as a non-substantive change request

Instrument Development

Rapid Surveys Instrument Development

Two rounds of review

- **Content review**
- **Programming review**

- **Instrument testing**
  - One round of testing with confirmatory check

- **Spanish translation**
  - Programming and testing

What challenges have we encountered?

- **How to structure the review process**
  - Trade-offs between review and programming
- **Communication between NCHS, RTI, Ipsos, and NORC**
  - Large volume of feedback
  - Consistency across multiple teams
- **Spanish translation timing**

What has worked well?

- **Cast a wide net for review and testing**
  - Dedicated round of review for programming
  - Data processing and analysis team review instrument
  - Sponsors participate in testing
- **Benefits:**
  - More eyes on the instrument
  - Align web instruments before programming begins
  - Reduce ad hoc decision-making during testing
  - Anticipate and avoid back-end issues

How do we make this approach work?

- **Involving more people in review can be hectic and may introduce version control issues**

- **RTI manages review across multiple groups**
  - Adapting approach based on previous rounds
    - Annotation of questionnaires
    - Live documents used for Spanish translation
  - Controlling flow of feedback
    - Tiered instrument review

Takeaways

- Close collaboration with expert sponsors helps fill pre-testing gap
- Frequent communication across project staff helps catch or prevent problems
- Additional time or effort early in the process can help streamline later activities
- Adapting round-by-round improves communication and management

Thank you!

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https://www.cdc.gov/nchs/rss/rapid-surveys-system.html

For more information, contact CDC
1-800-CDC-INFO (232-4636)
TTY: 1-888-232-6348 www.cdc.gov

Reserve Slides

Pre-Data Collection Timeline

- **Content Development**
  - Develop contributed content: 4 weeks*
  - Identify benchmark, calibration, and profile items: 2-3 weeks*
- **Instrument Development**
  - Content review: 3 weeks
  - Programming review: 3 weeks
  - English programming and testing: 4 weeks*
  - Spanish translation and review: 4 weeks*
  - Spanish programming and testing: 3 weeks

➢ **Instrument finalized and ready for launch**

- **Total: ~5 months**