

Refusal Conversions: When to Call It Quits

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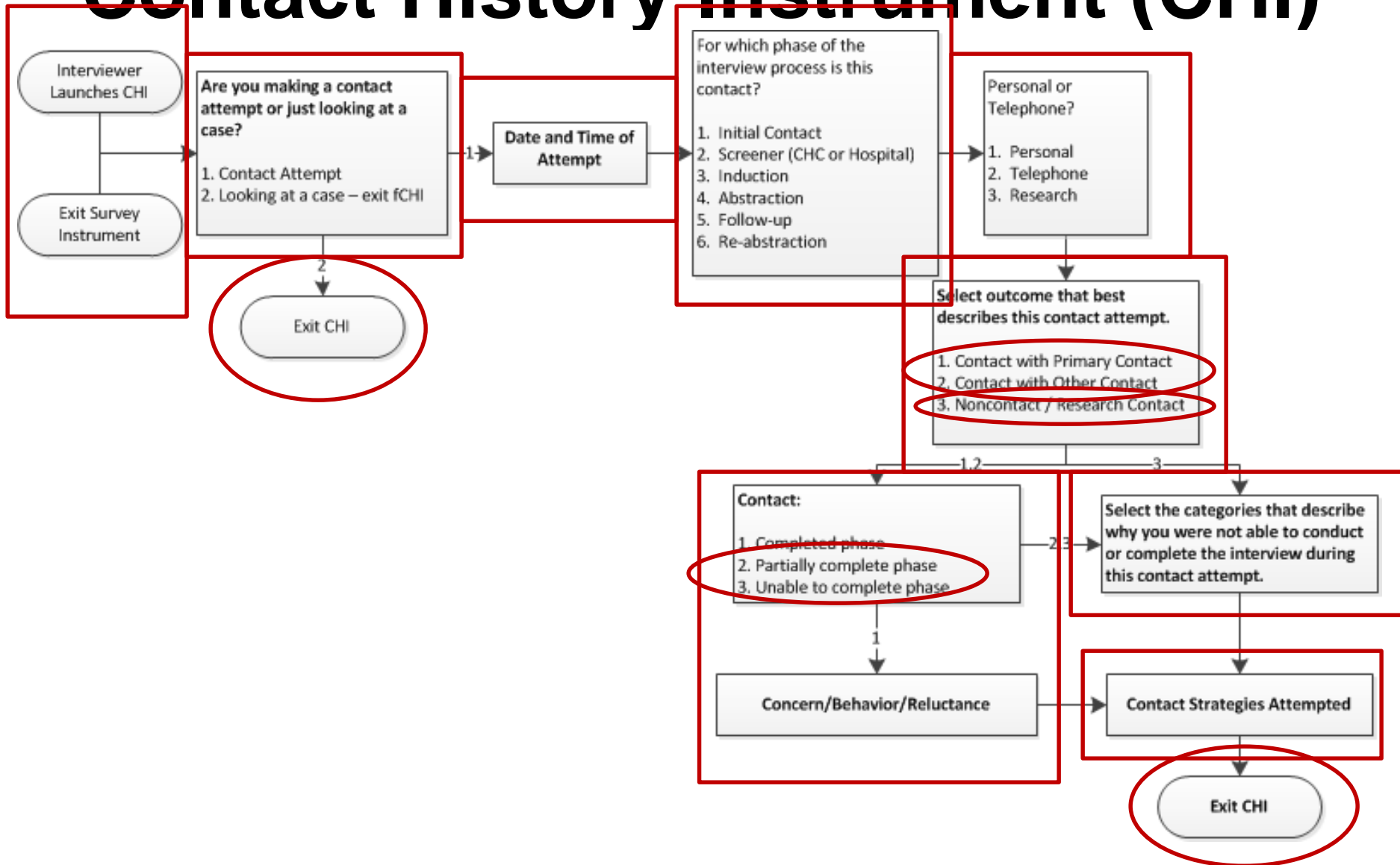
Disclaimer: The views expressed on statistical, methodological, technical, or operational issues are those of the author and not necessarily those of the U.S. Census Bureau or the National Center for Health Statistics.

Special thanks to National Center for Health Statistics, who sponsors the collection of data used in this presentation!

Data Collection Efforts

- National Ambulatory Medical Care Survey (NAMCS)
 - National survey of office-based physicians and community health center (CHCs) providers engaged in direct ambulatory patient care
 - Collected via abstraction of medical records
 - Multi-phase interview with personal visits and telephone contact attempts
- Paradata Collection – interviewers record info about each contact attempt

Contact History Instrument (CHI)



NAMCS Paradata

Data

- All contact attempts made from January 2013 to October 2013
- All calculations are unweighted
- Use of interim outcome codes

Hard v. Soft Refusals

- Hard Refusals:
 - No information provided to the interviewer at all
- Soft Refusals:
 - Made contact but incomplete interview due to reluctance
 - Provided some additional information pertaining to reluctance

Prevalence of Reassignment

- 39% of all physician cases are reassigned
 - 2 additional personal visits
 - 31% conversion rate
 - 10% of physicians are soft refusals
 - 26% of all reassigned cases
 - 3 additional personal visits
 - 21% conversion rate
 - 6% of physicians are hard refusals
 - 16% of reassigned cases
 - 1 additional personal visit
 - 18% conversion rate
- ⇒ 42% reassigned for refusal conversion

Research Questions

- Can we enhance operational efficiency without sacrificing data quality?
 - Does it increase response rates?
 - Can we guide reassignment more effectively?

Evaluating Reassignment and Refusals

Descriptive Methods

- Modification of response rate calculations
 - Accept first refusal as final disposition

- Response Rate Calculation:

$$\frac{\textit{Completed Interviews} + \textit{Partial Interviews}}{\textit{All Physicians} - \textit{Out of Scope Physicians}}$$

- Specialty Distribution
 - Change in sample distribution

Cox Proportional Hazard Models

Regressing interview completion of reassigned cases on case characteristics:

- Respondent Concerns
- Interviewer Strategies
- Prior contacts
- Timing of reassignment
- Status at reassignment
- Regional Office control

Results

Note: These are preliminary response rates. Final response rates are calculated by NCHS on fully processed data files.

Descriptive Results

- Not reassigning refusals reduced the response rate:
 - Hard refusals = 1.4%
 - Soft refusals = 6.4%

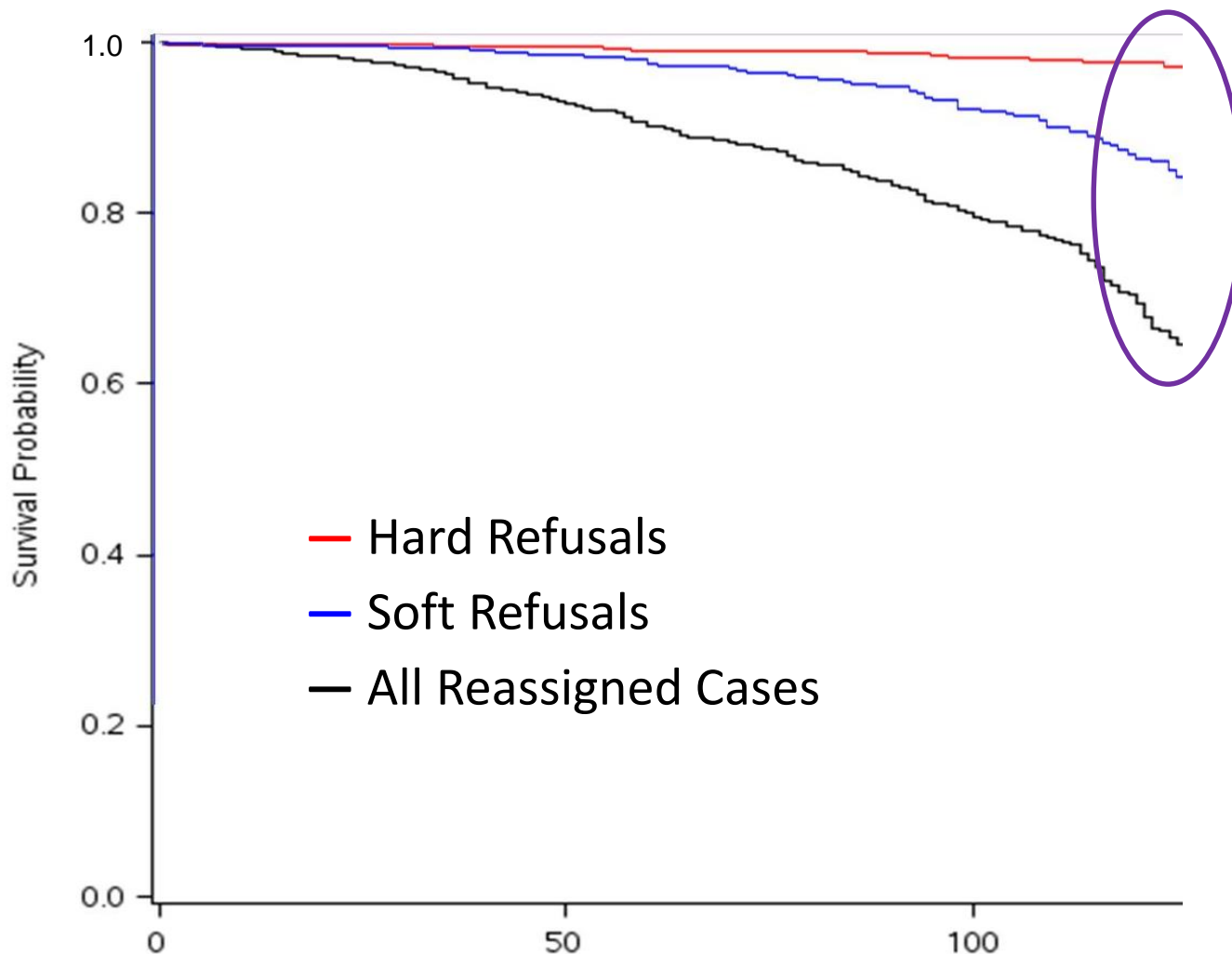
- Changed the distribution of Physician Specialty:
 - Hard refusals = 2.9%
 - Soft refusals = 9.2%

Selected Model Results

Characteristic	Likelihood of Interview Completion
Weeks elapsed to reassignment	↓ 40-45%
Scheduled appointment	3.24 times (Hard Refusal) 3.43 times (Soft Refusal)
Locating activities	2.5 times (Soft Refusal Only)

Source: NAMCS Contact History Instrument Paradata, January – October, 2013.

Survival Curve



Source: NAMCS Contact History Instrument Paradata, January – October, 2013.

Suggested Guidelines

- Case reassignment:
 - Only reassign soft refusals
 - Reassign cases early in the interview period
- Schedule and confirm appointments whenever possible
- Spend some time researching the physician
 - Customize the personal visit
 - Establish personal and professional connection

What's Next?

Future Research

- Telephone attempts
 - 3 telephone attempts prior to first personal visit
 - Complete first portion of the interview via telephone
- Restricted personal visits
 - 6 visits to complete the first portion
 - Max of 10 personal visits
- Delayed start
 - Start working the case after the reference week

Thank You!

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