

Phone Surveys using Random Digit Dialing

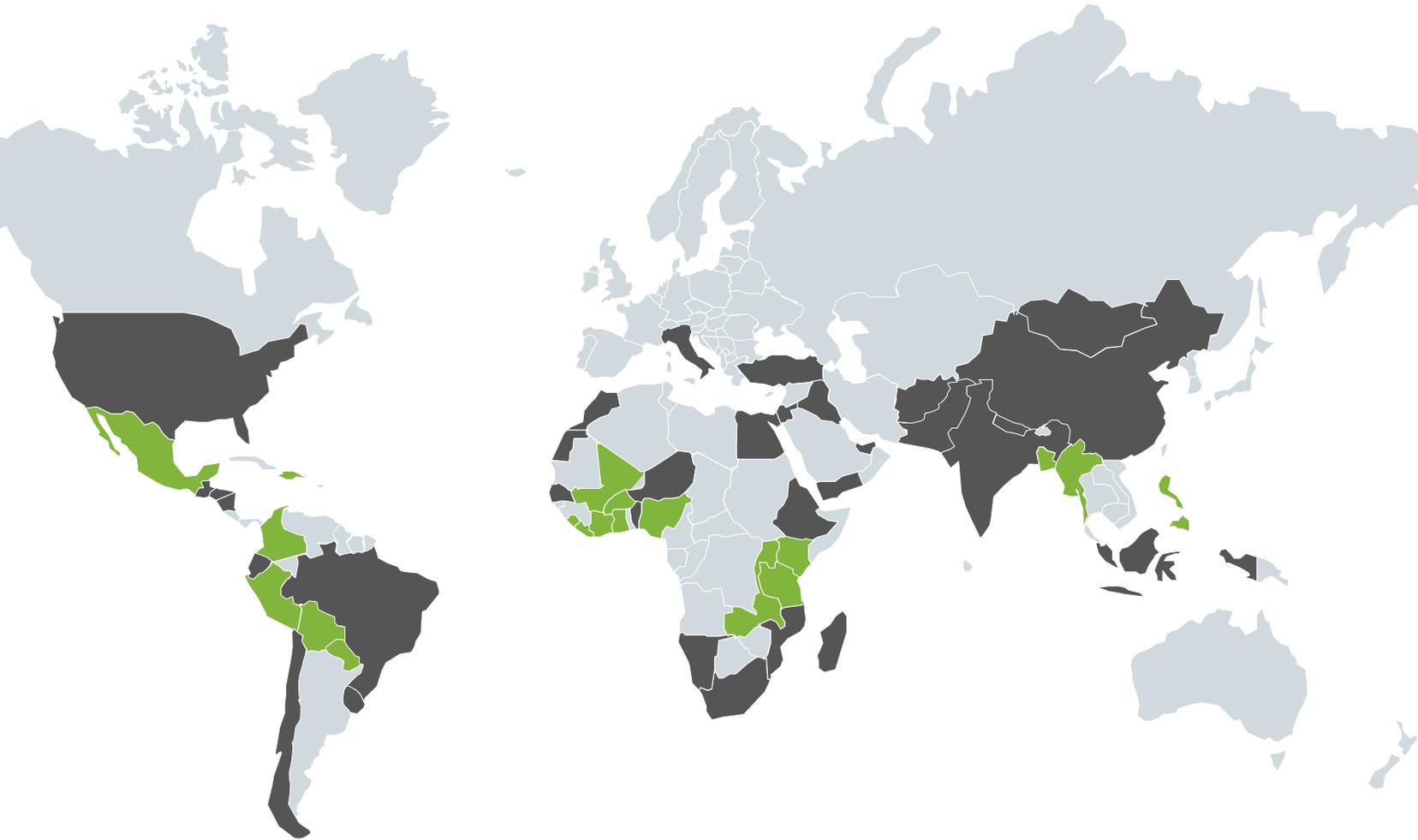
Northwestern
GLOBAL POVERTY
RESEARCH LAB



Lessons learned from IPA's multi-country RECOVR surveys
June 29, 2021



Innovations for Poverty Action



700+ partners

850 + researchers in our network

677 completed studies across 51 countries

IPA's Approach



Identify
issues



**Design
or identify**
solutions



Evaluate
these
solutions



**Incorporate
Evidence**
Into programs
and policies



Engage Policymakers and Champion the Use of Evidence
throughout the process

Panelists

Andrew Dillon



Northwestern University,
Kellogg School of Management

Shana Warren



IPA, Path-to-Scale Research

Laura Polanco



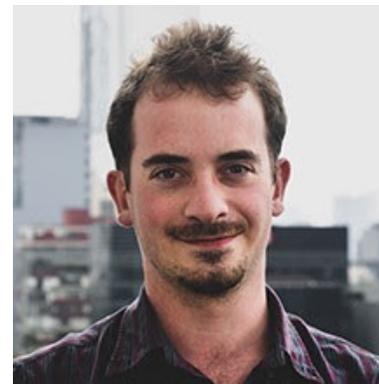
IPA, Colombia & the Dominican Republic

Margarita Cabra



IPA, Colombia & the Dominican Republic

Cosma Gabaglio



IPA, Mexico

The Research Methods Initiative and Phone Surveys

RECOVR Webinar Series

Andrew Dillion

Research Methods Initiative

Northwestern

GLOBAL POVERTY
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- Help researchers make more **informed design choices**
- Suggest best practices for data collection teams to **improve survey data quality**

Why is this important?

- Bad data, weak evidence
- Policy decisions based on weak evidence may be misguided

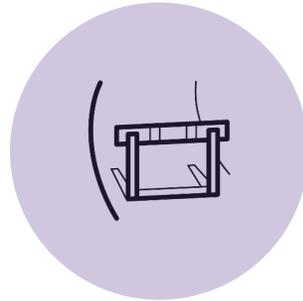
Good Identification, Meet Good Data



Goal

Researchers maximize knowledge by making design choices to produce:

- Causal estimates
- High probability of detecting true effect
- Generalizability



Constraints

Budget
Data quality



Opportunity

Informed design choice tradeoffs to produce high data quality to maximize knowledge

Phone Survey Learning to Inform COVID response

Phone surveys offer researchers an option to ease the budget constraint, but use in future surveys is contingent on understanding:



Productivity

What protocols increase response rates?



Representativeness

Do these protocols affect sample composition?



Data Quality

Can interviewers elicit accurate responses over the phone?

IPA conducted 70+ phone surveys in 2020

The following elements in each phone survey make methods research possible:



Pre-survey SMS messaging



Varied protocols

- Days and timing of calls
- Rescheduling calls
- Maximum attempts to same number



Data

- Each call attempt recorded separately
- Standardized codes for outcome of call, and when respondents drop-off



Interviewer survey

Phone Surveys using Random Digit Dialing (RDD)

Lessons learned from IPA's multi-country RECOVR surveys

Shana Warren
June 29, 2021

In 2020 IPA launched the RECOVR phone survey in 10 countries

We collected a standard set of metadata and paradata to try to answer:



What types of protocols can **increase survey response rates** & productivity?



How does respondent **attention** and survey **duration** affect response quality?



Can some **skill measurement** be conducted remotely?



How **representative** are phone surveys?



How do **interviewers' skills** affect surveying success & data quality?

When do we lose potential respondents?



Pickup

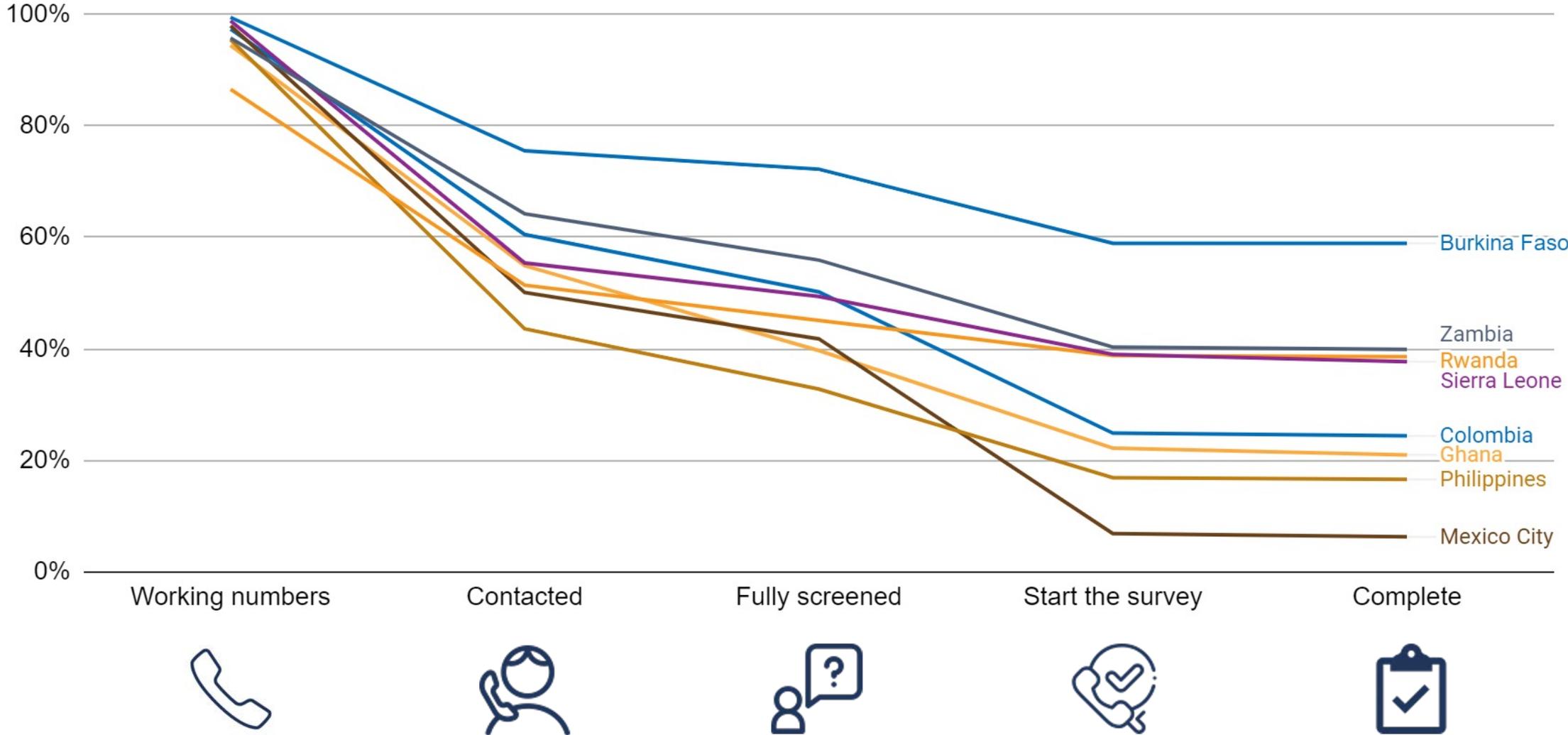
Screening

Availability

Consent

Completion

Response rates vary by country



How could pre-survey SMS impact response rates?



Pickup



Screening



Availability



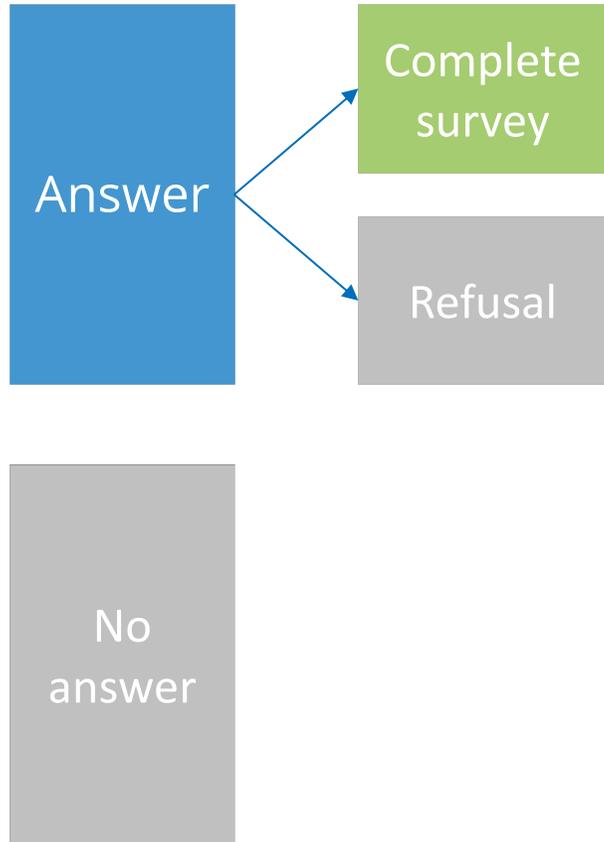
Consent



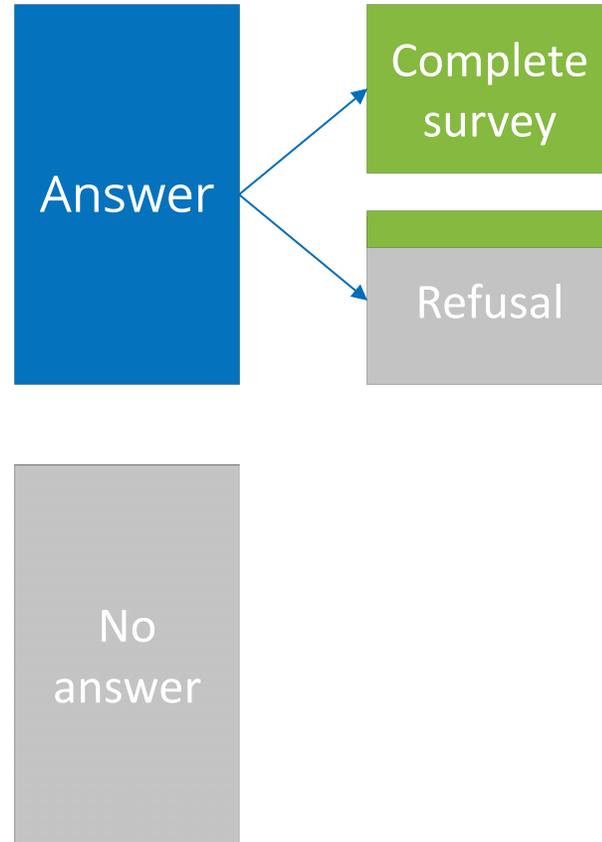
Completion

Impacts of SMS on response rates

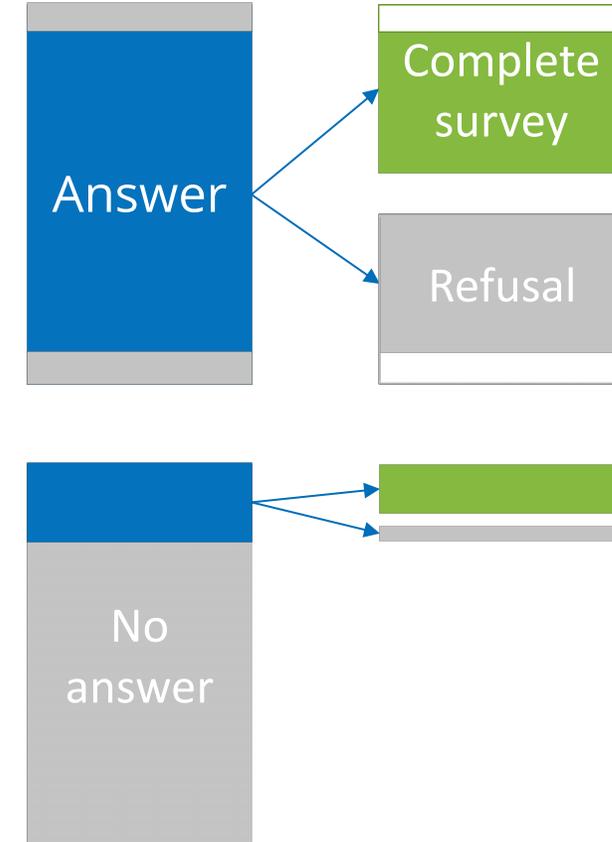
No SMS



SMS Convert refusals



SMS Screen calls



Respondents who would have taken the survey

Respondents who would not have answered

Example pre-survey SMS message

Branding

Hello, this message is from IPA, an international NGO that discovers and promotes effective solutions to global poverty problems. In the coming days, we may call you

Call information

to conduct a survey to **help researchers** understand

(Timing)

Motivation to take the survey

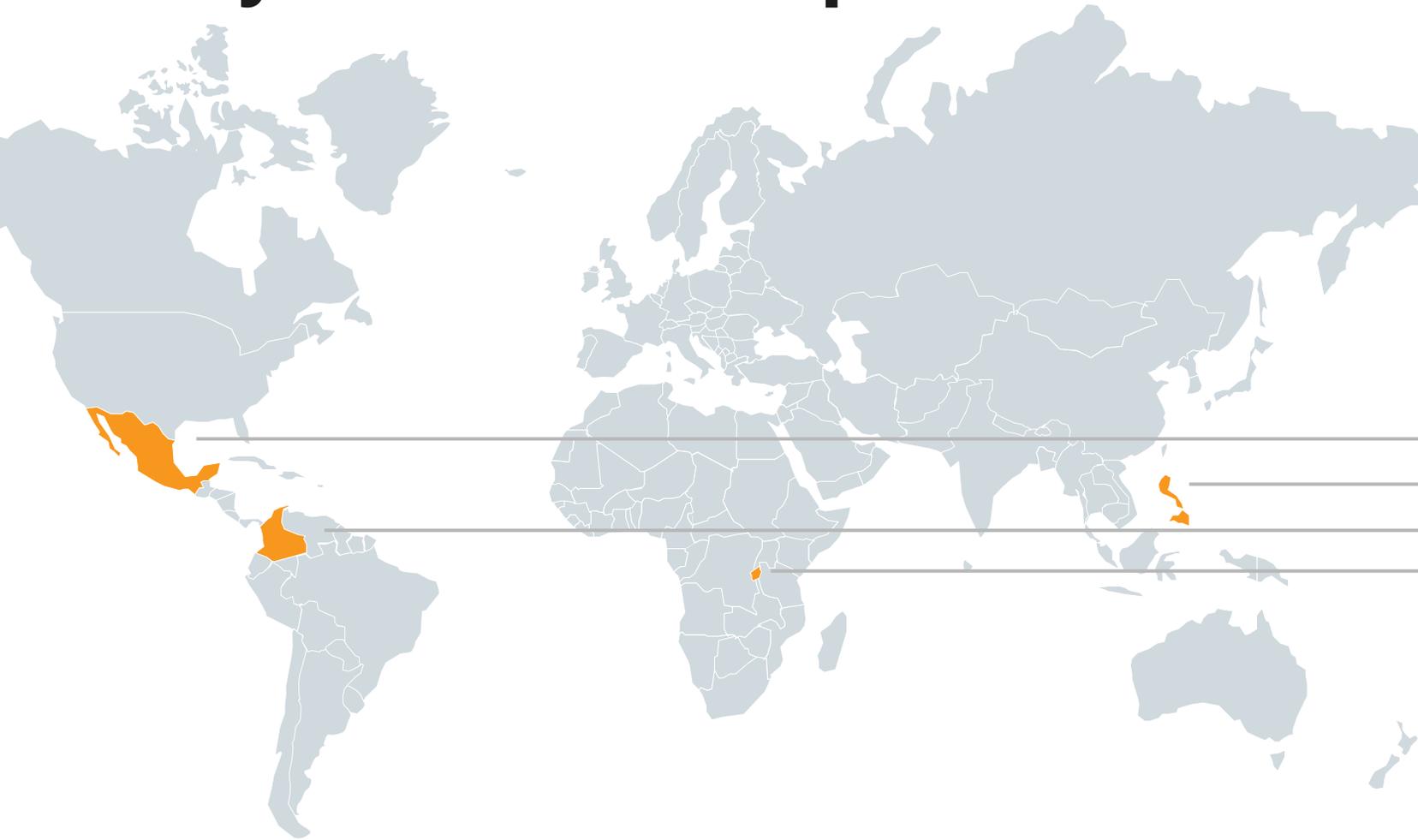
the dynamics of COVID in [Country's] households. We

hope we can count on you. To learn more about IPA:

Branding

[www.poverty-action.org/country/\[Country\]](http://www.poverty-action.org/country/[Country])

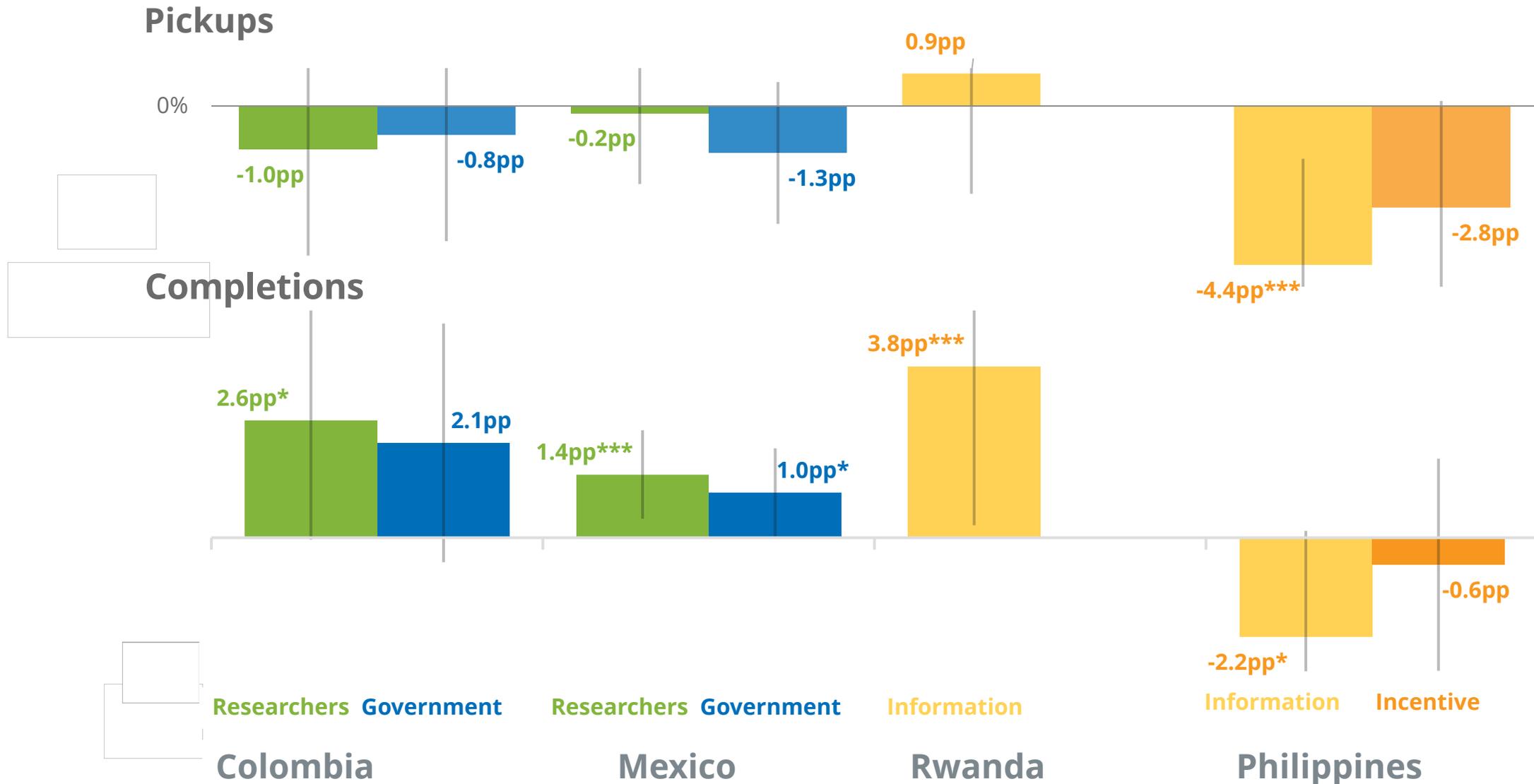
We randomly assign numbers to receive an SMS or not to try to increase response rates



Assignments include multiple content variations

25% Government 25% Researcher
33% Information 33% Incentive
25% Government 25% Researcher
50% Information

Pre-survey SMS may increase response rates



How could the number of call attempts affect response rates?



Pickup

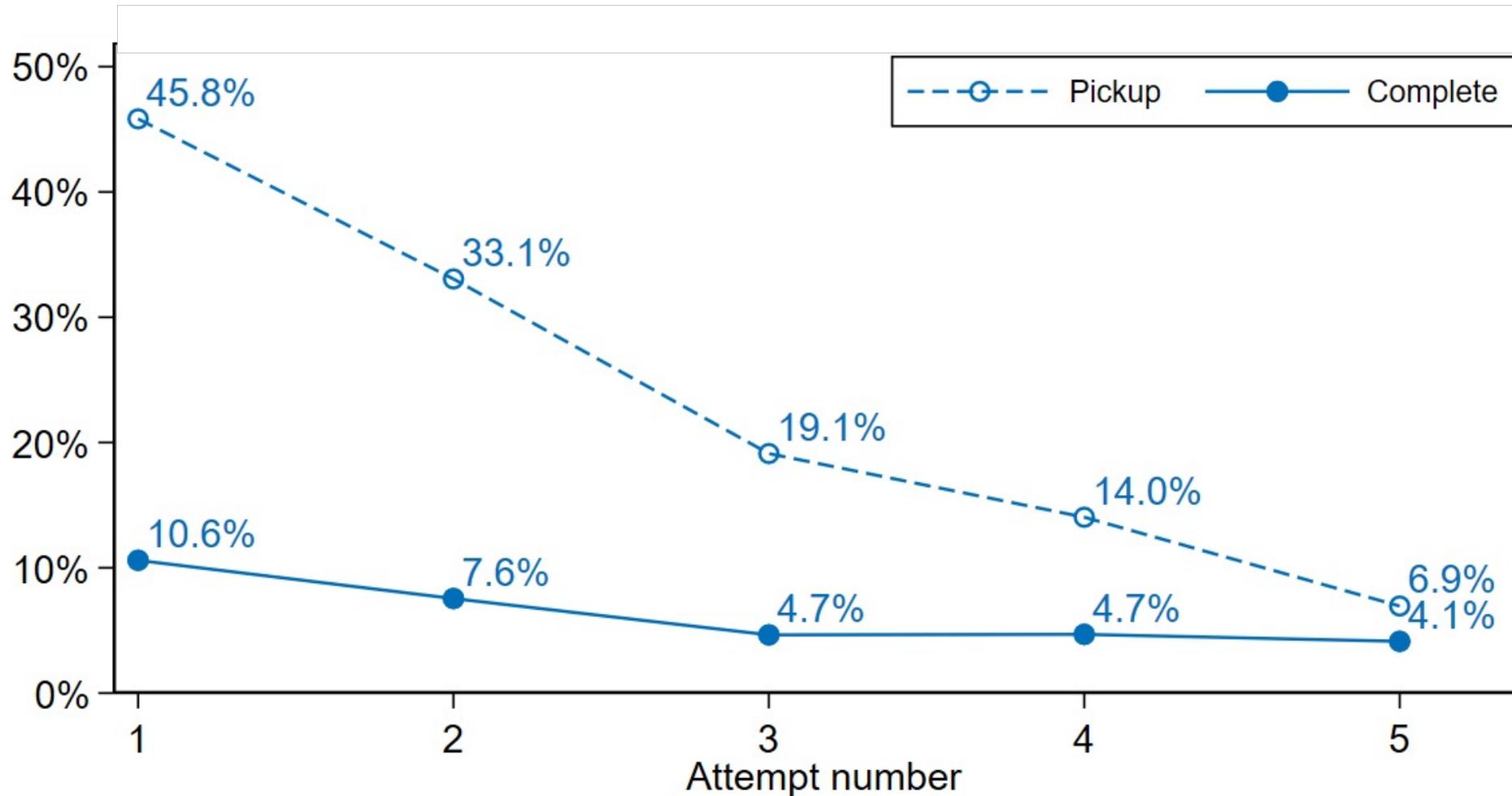
Screening

Availability

Consent

Completion

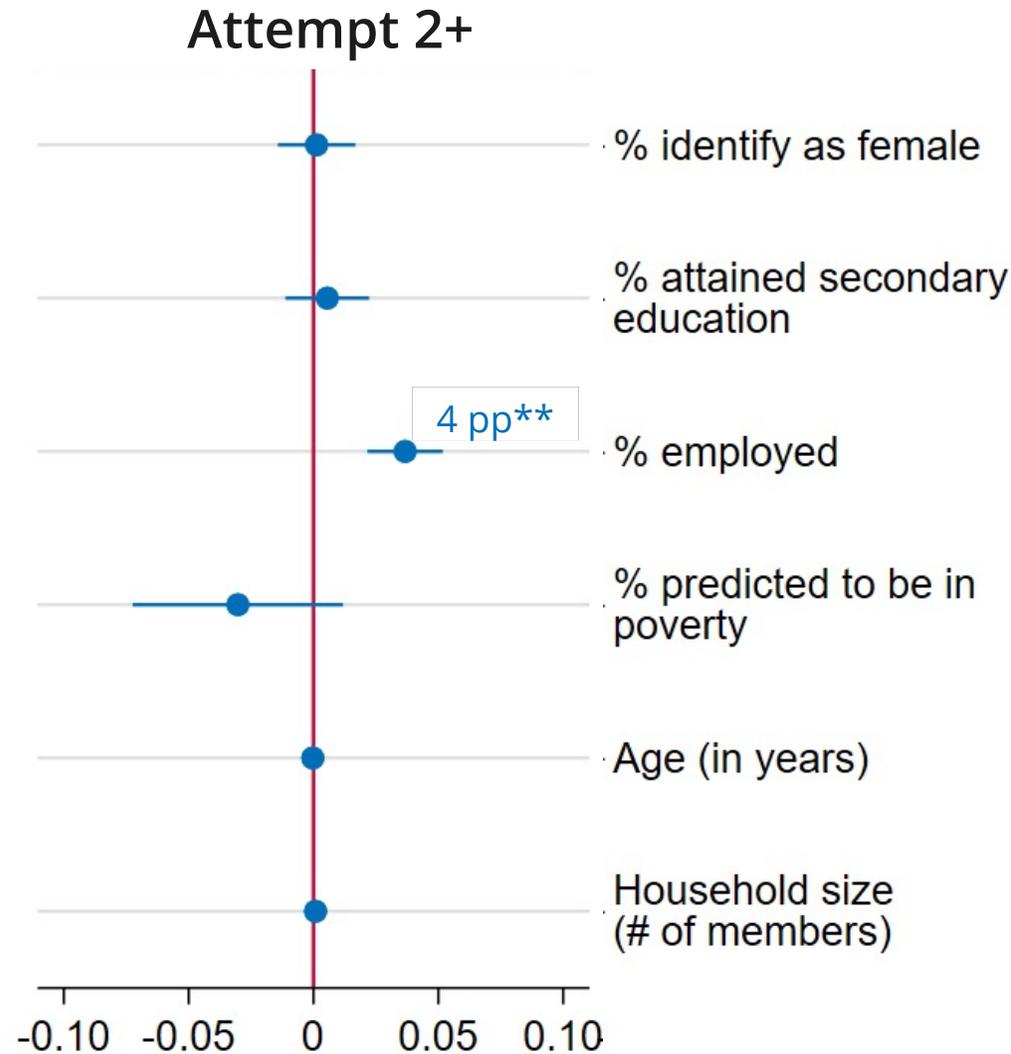
On later attempts more respondents screen calls, but still complete the survey



Steep drop off in pick-up rate for increasing attempts

Completion rate falls off at a slower pace

Respondents to attempt 2+ differ on important observable characteristics



Most countries show a statistically significant difference in the number of employed respondents

Other characteristics have differences in the size of the change by country

Key Takeaways



Optimism that **SMS messaging may increase response rates**, likely without affecting sample composition

SMS messaging was inexpensive (<\$100 for 1000-2000 SMS) in most contexts



Additional attempts produce a **sample with different observable characteristics**, but with reduced productivity



Many **questions remain**, including:

Are these results similar with different forms of sample recruitment?

How, if at all, is data quality affected?

Methods Notes

These results are summarized as part of GPRL's working paper series on SSRN:

- [Understanding Response Rates in Random Digit Dial Surveys](#)
- [Messaging to Improve Response Rates](#)
- [Optimal Timing for Random Digit Dialing](#)

Increasing Response Rates Using Pre-survey Notifications

Lessons learned from Mexico's RECOVR survey

Cosma Gabaglio
July 29, 2021

Random Digit Dial Surveys in Mexico City



Response rates are low

- 6.4% of cases result in a completion
- 4.2% of attempts result in a completion
- 39.3% of attempts are answered



What do low response rates cause?

- Increased costs & extended timelines
- Reduced enumerator job quality
- Unknown effects on sample composition

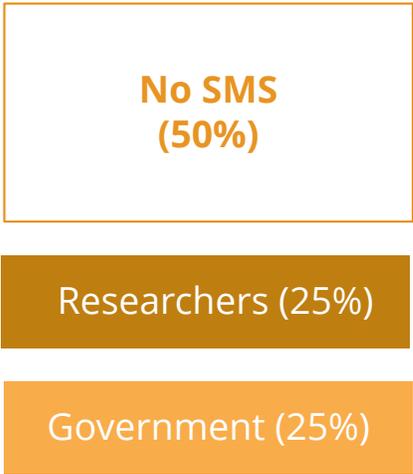
What can we do?

Aim to increase response rate through survey protocol changes

- 1 Pre-survey contact
- 2 Number of attempts
- 3 Enumerator staffing
- 4 Gaps between attempts

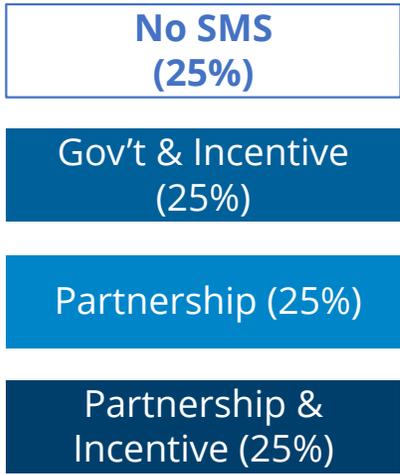
We don't know how these changes affect response rates, sample composition, and data quality

Choose the best protocols through a “low-tech” adaptive experiment



Any SMS improves completion by 26%

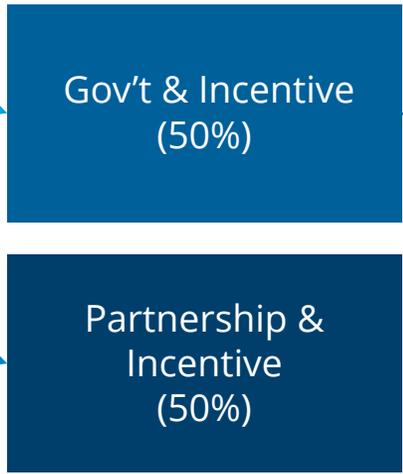
Tranche 1
14,465 cases



Start with 3 SMS groups and 1 “No SMS group”

Tranche 2
6,924 cases

Reassignment after 2 days



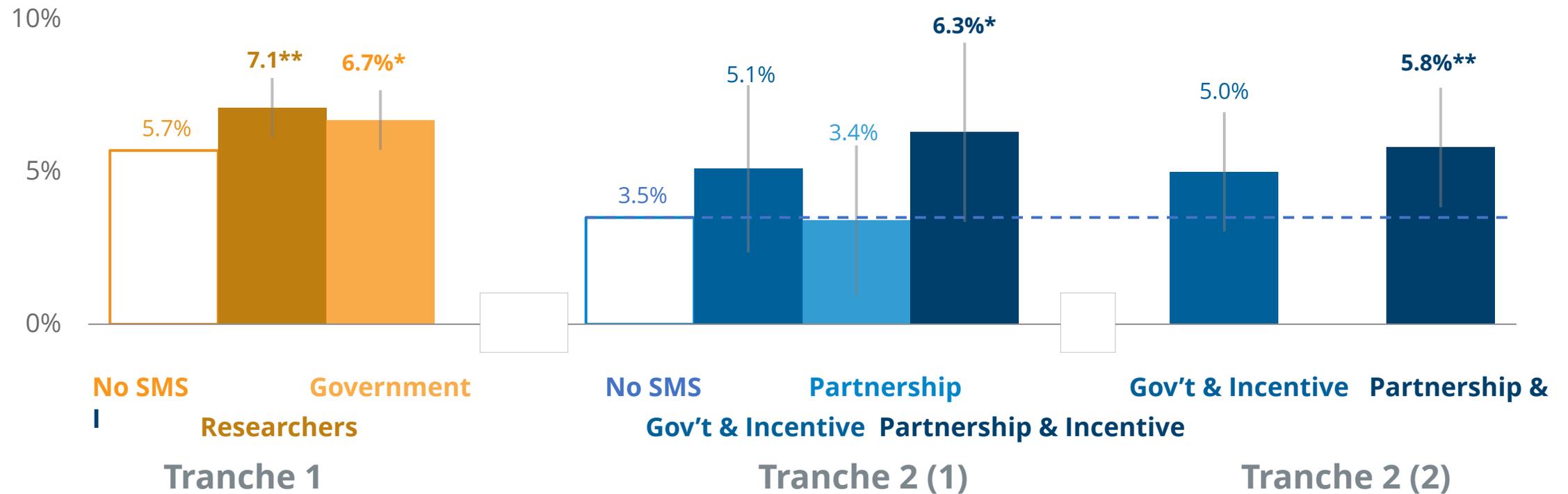
2 worst performing groups randomly assigned to remaining groups

Reassignment after 2 days



Remaining cases receive best performing group

Completion rates increase due to SMS without detectable differences between SMS content



Sample composition remains consistent



No detectable differences in sample composition among the first set of SMS messages compared to no SMS

Not enough statistical power to detect differences among the second tranche of messages

Lessons Learned



Protocols matter



Experimenting with SMS messaging was effective

Substantive increase in completion rate by 66 percent in the best performing group



No substantive changes to sample composition

Reducing Respondent Attrition with Survey Protocols

Lessons learned from Colombia's RECOVR surveys

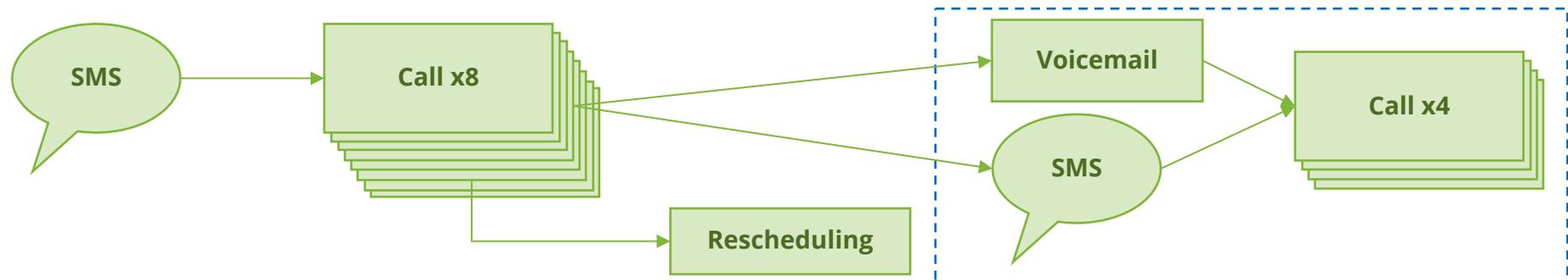
Laura Polanco and Margarita Cabra
June 29, 2021

Protocols are an avenue to decrease attrition

Round 1
RDD

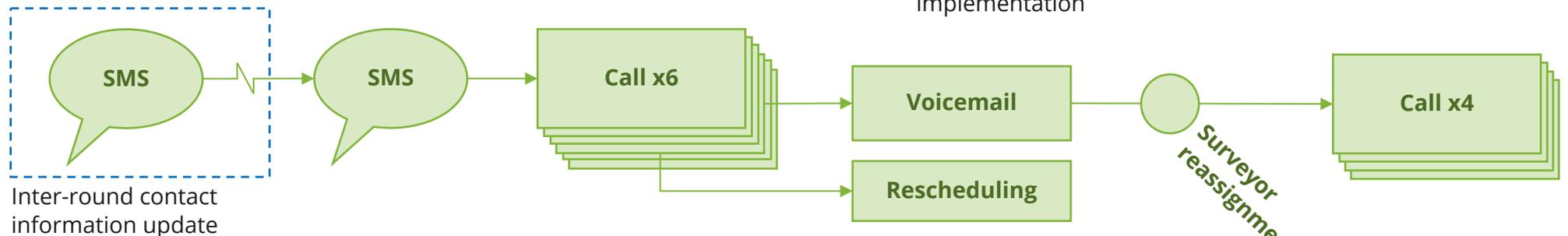


Round 2
Follow-up 1
+3 months

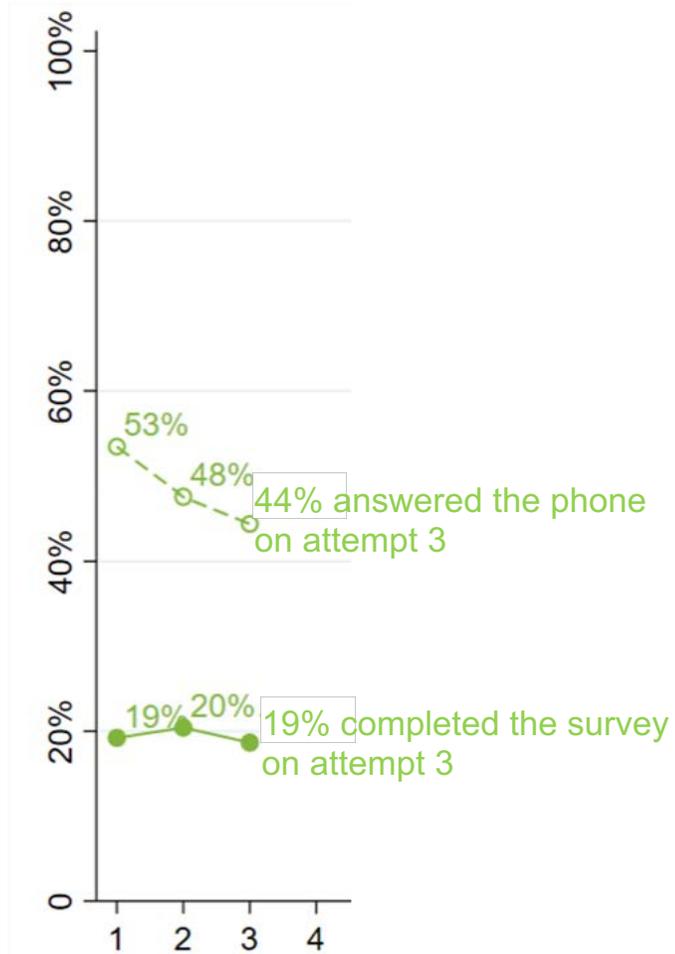


Added due to high attrition rates during implementation

Round 3
Follow-up 1
+6 months

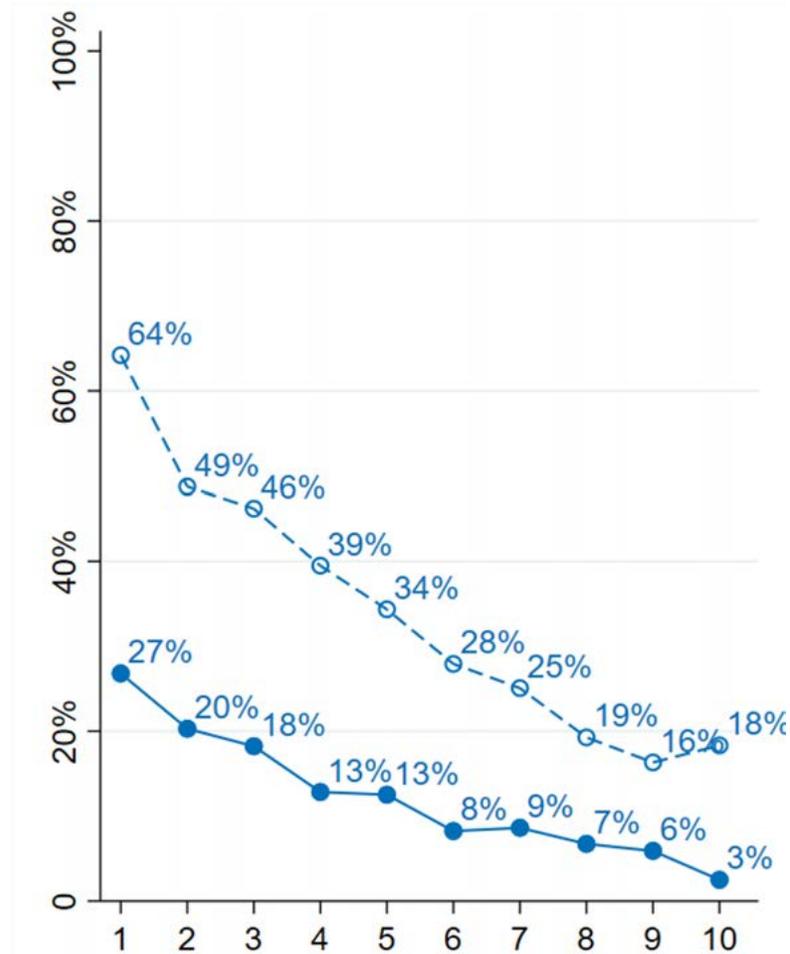


Respondents still complete the survey on later attempts



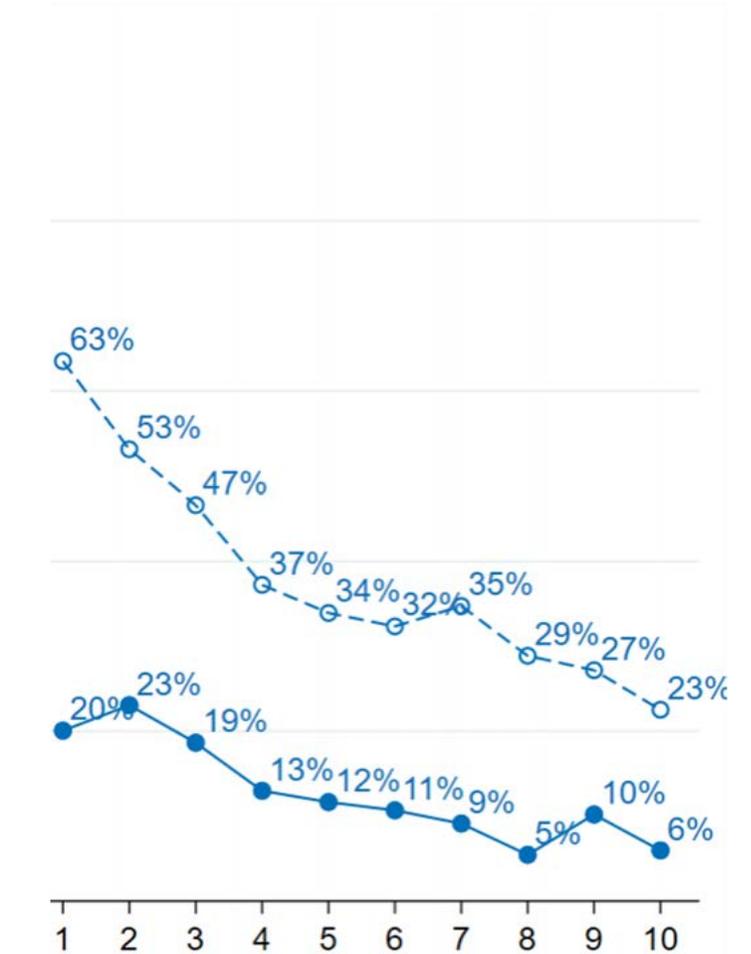
Round 1 (New Sample)

24.3% responded



Round 2

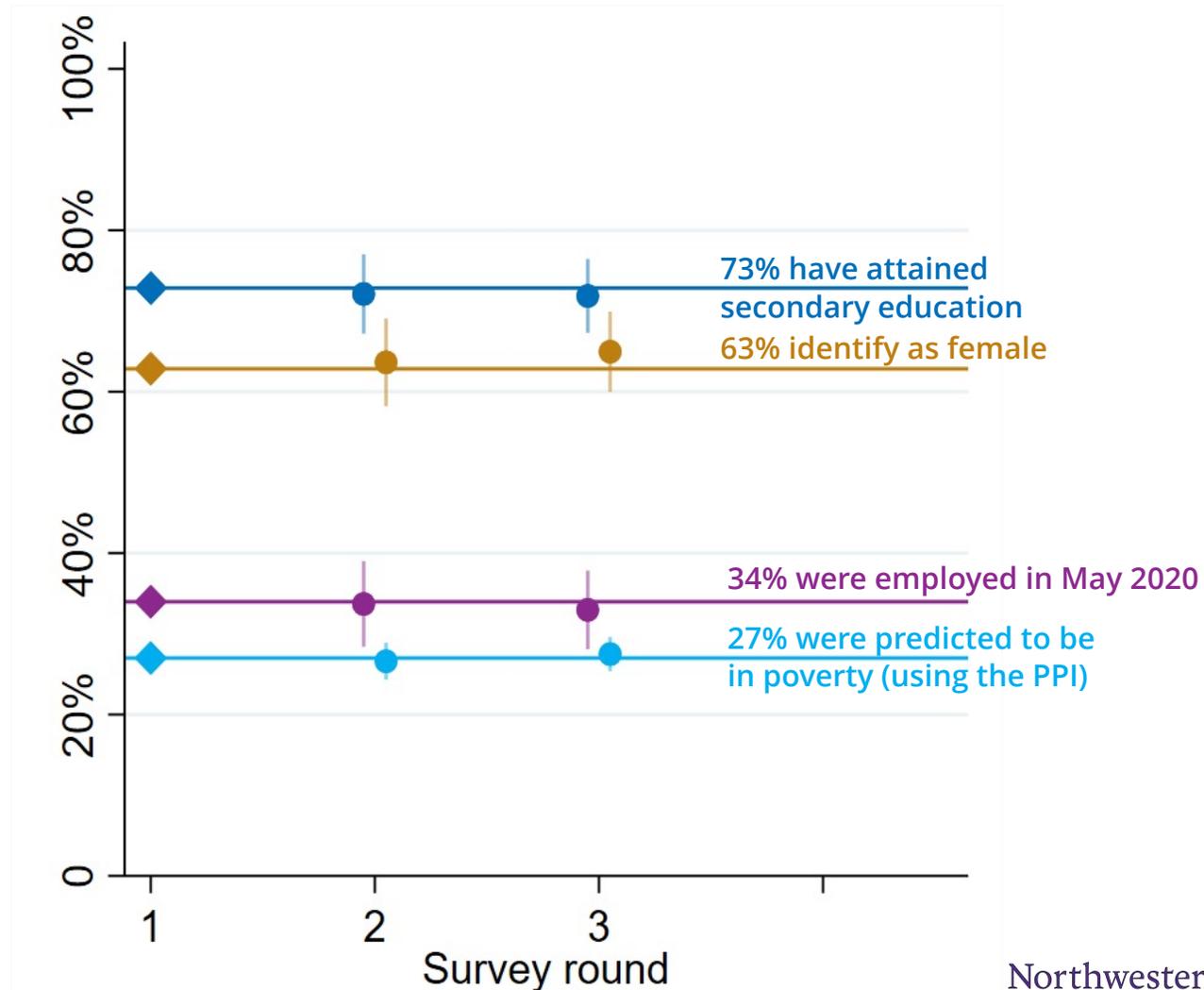
69.6% responded



Round 3

72.2% responded (of round 2)

Respondent attrition was not associated with changes in important observable characteristics





Not just protocols

Questionnaire design also matters

1

Ask household rosters in the baseline to use household membership data in later rounds

2

Prioritize household members for whom information is most important

3

If we don't know which members to prioritize, Randomly choose household members

Reducing the length of the survey can make surveys more appealing to respondents. Household rosters are a good place to start.

Lessons Learned



The loss of respondents is significant in phone surveys using RDD

Despite attempts to mitigate this



There are associated costs in trying different techniques

Rule of thumb: Implement protocols if there are few associated costs or disadvantages and evidence that they will not reduce response rates

Limited statistical power during later attempts because many cases are already closed