

# Lessons Learned from Three Years of Data Collection Using an Address Based Sample for a Telephone Survey

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# Outline for presentation

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Brief background on the Family Health Survey

Implementing CATI data collection with an address based sample

Experience using address based sample for a CATI only data collection

Summary

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# Survey background: Wisconsin Family Health Survey

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## Family Health Survey



WISCONSIN DEPARTMENT  
of HEALTH SERVICES

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The Family Health Survey is a statewide population health survey focusing on:

- Health status
- Use of health care services
- Health insurance coverage

This is a survey of households. We collect data about all household members: including adults, children, relatives, and any non-relatives.

Selection of respondent based on self-reported knowledge

# Changing the sample frame for the Family Health Survey

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Sample frame before 2012 was an RDD sample of landline telephone numbers only

In 2012 switched to an address based sample

## Reasons for change:

- sample frame with near 100% coverage of all households
- reliable specific geographic information
- ability to use addresses to increase contacts via the mail

## Issues caused by change:

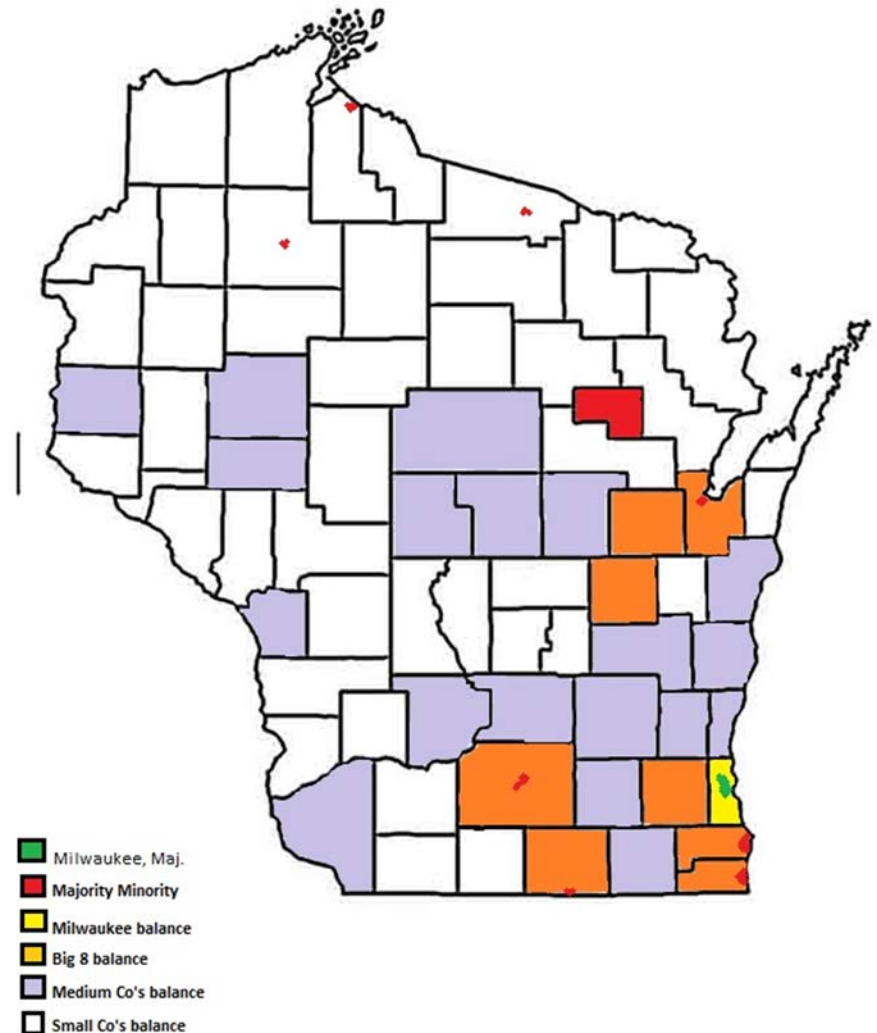
- sampling locations not phone numbers
- multiple pronged process to collect data
- Increase field & weighting complexity



# Address based sample for the Family Health Survey

## Current sample structure

- Listed residential addresses only
- Stratified random sampling of addresses with six strata
- Goals for year divided across to two periods - Spring and Fall
- Addresses sampled twice a year - Spring and Fall
- Vendor draws and attempts to match each address to a telephone number



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Brief background on the Family Health Survey

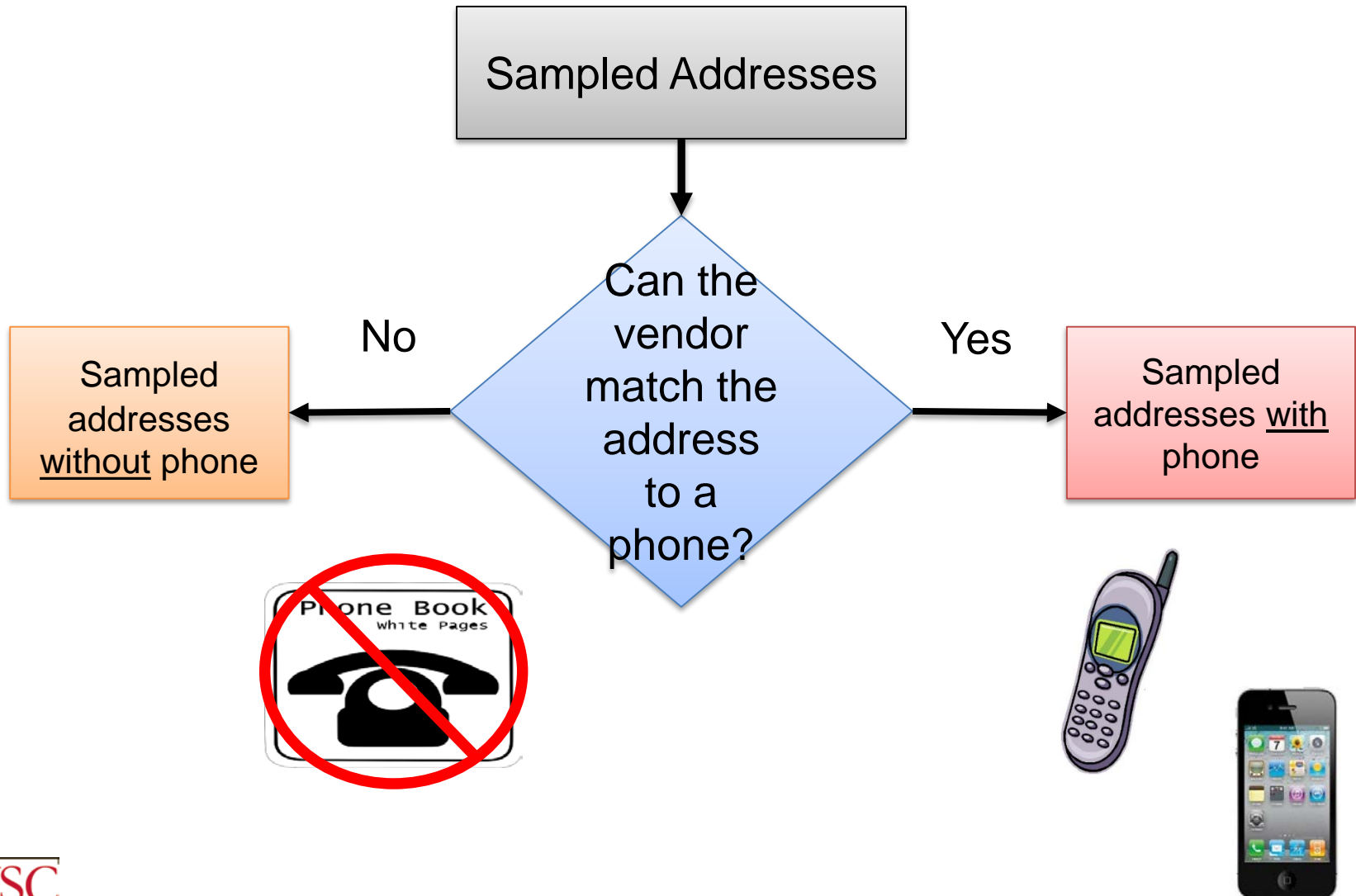
**Implementing CATI data collection with an address based sample**

Experience using address based for a CATI only data collection

Summary

# Implementing a CATI data collection with address based sample

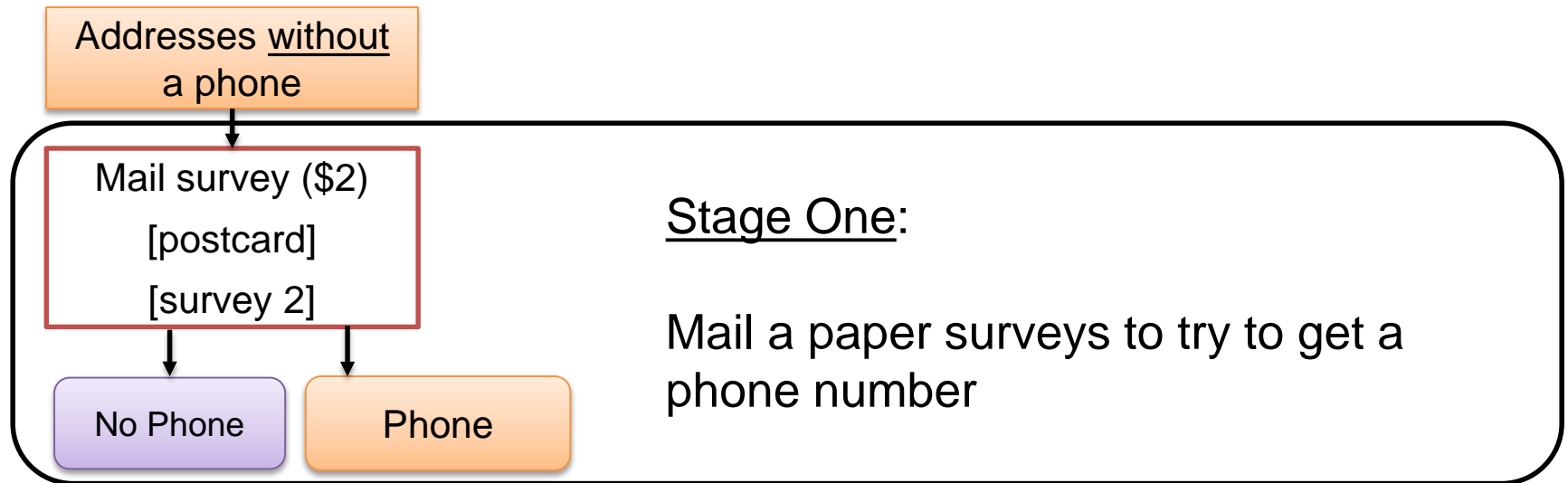
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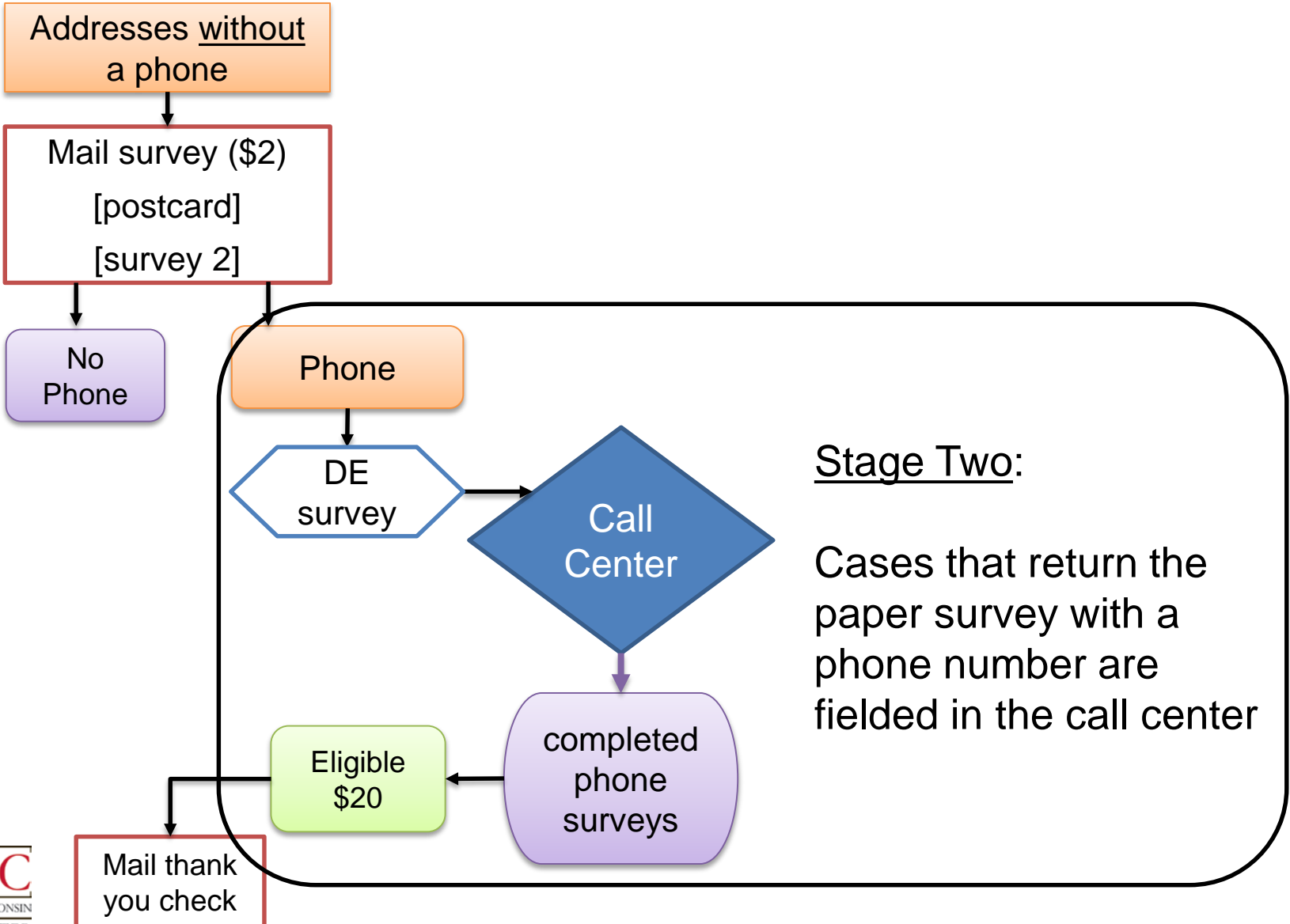


# Process for addresses without a phone number from vendor

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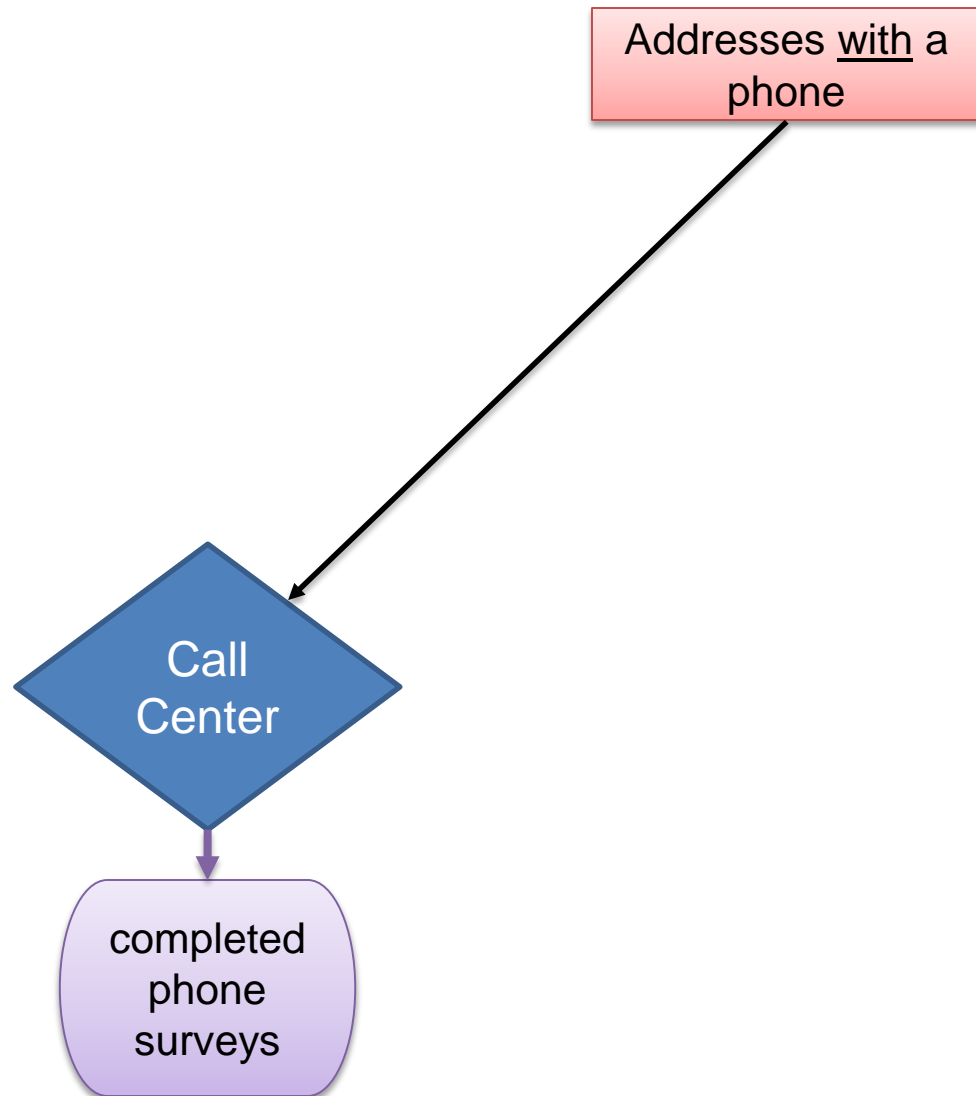


# Process for addresses without a phone number from vendor

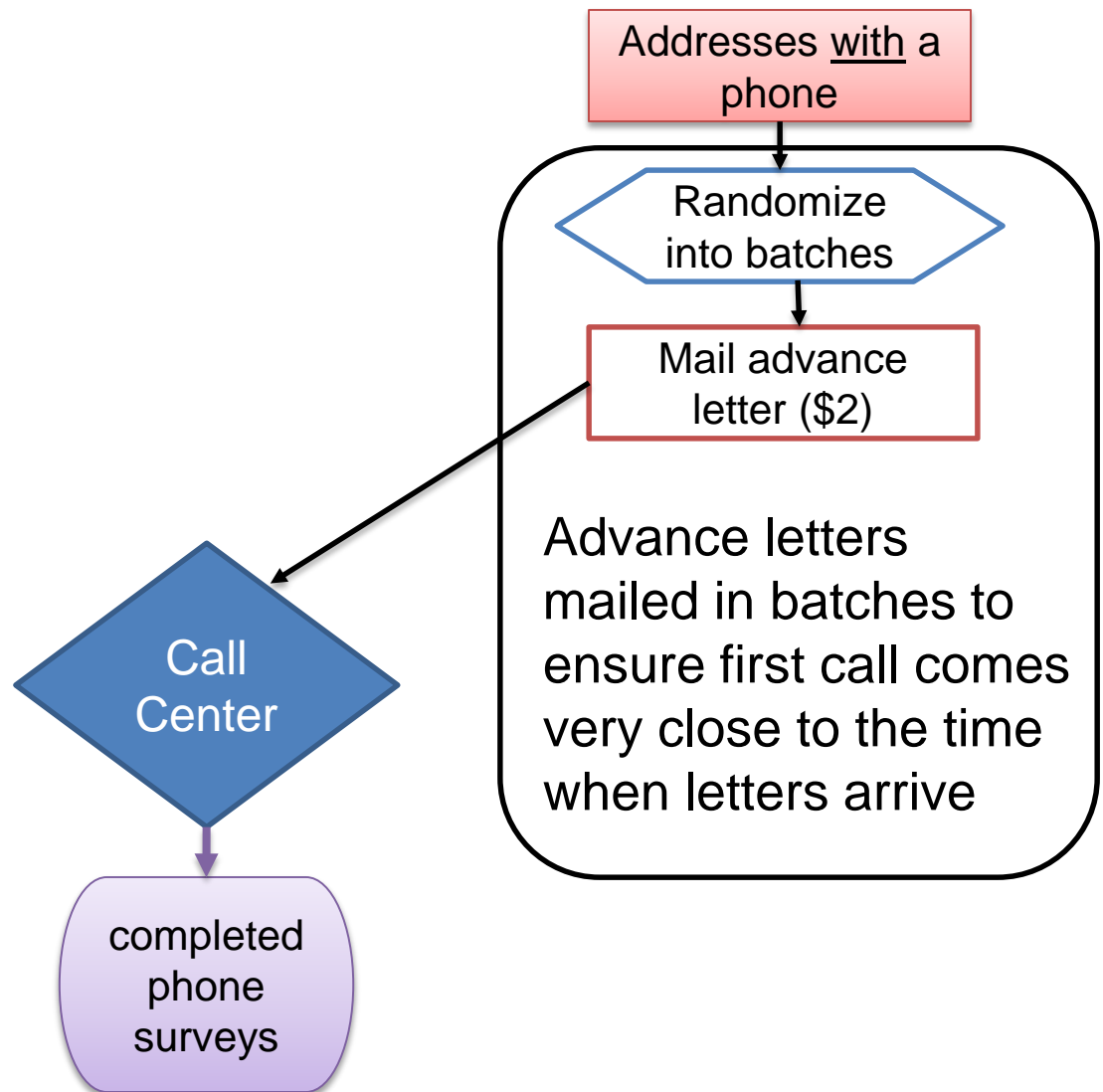


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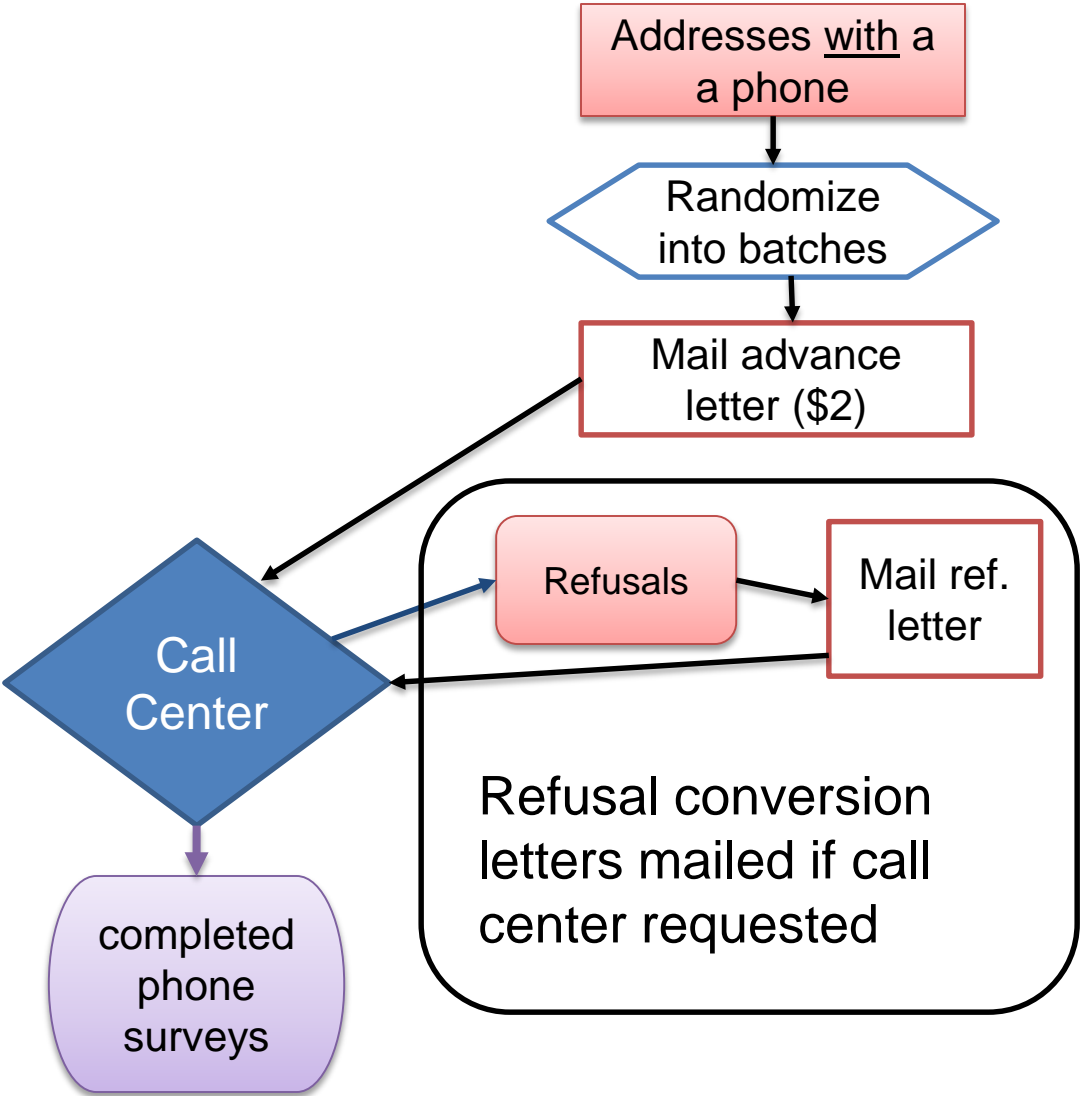
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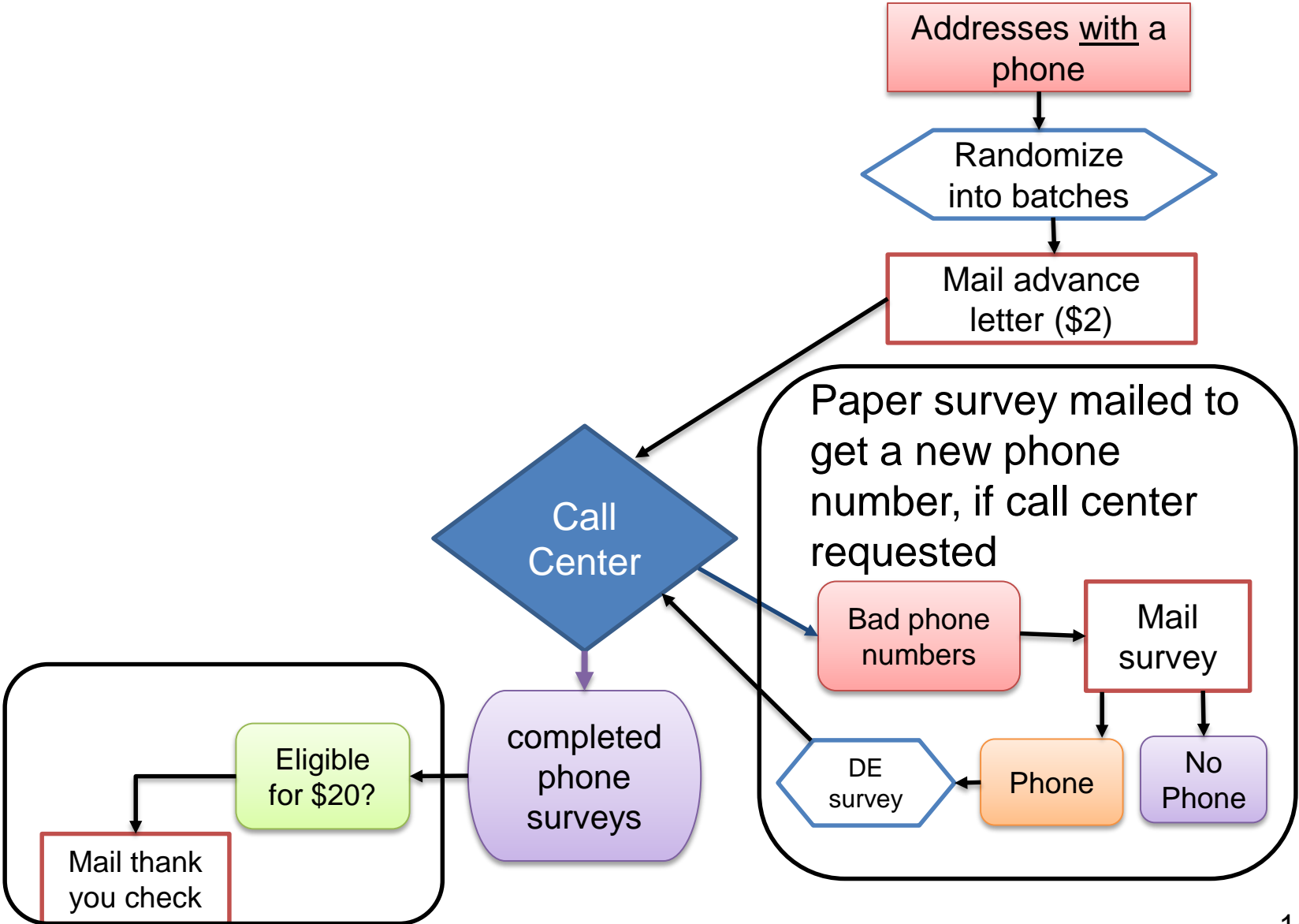
# Process for addresses with a phone number from vendor



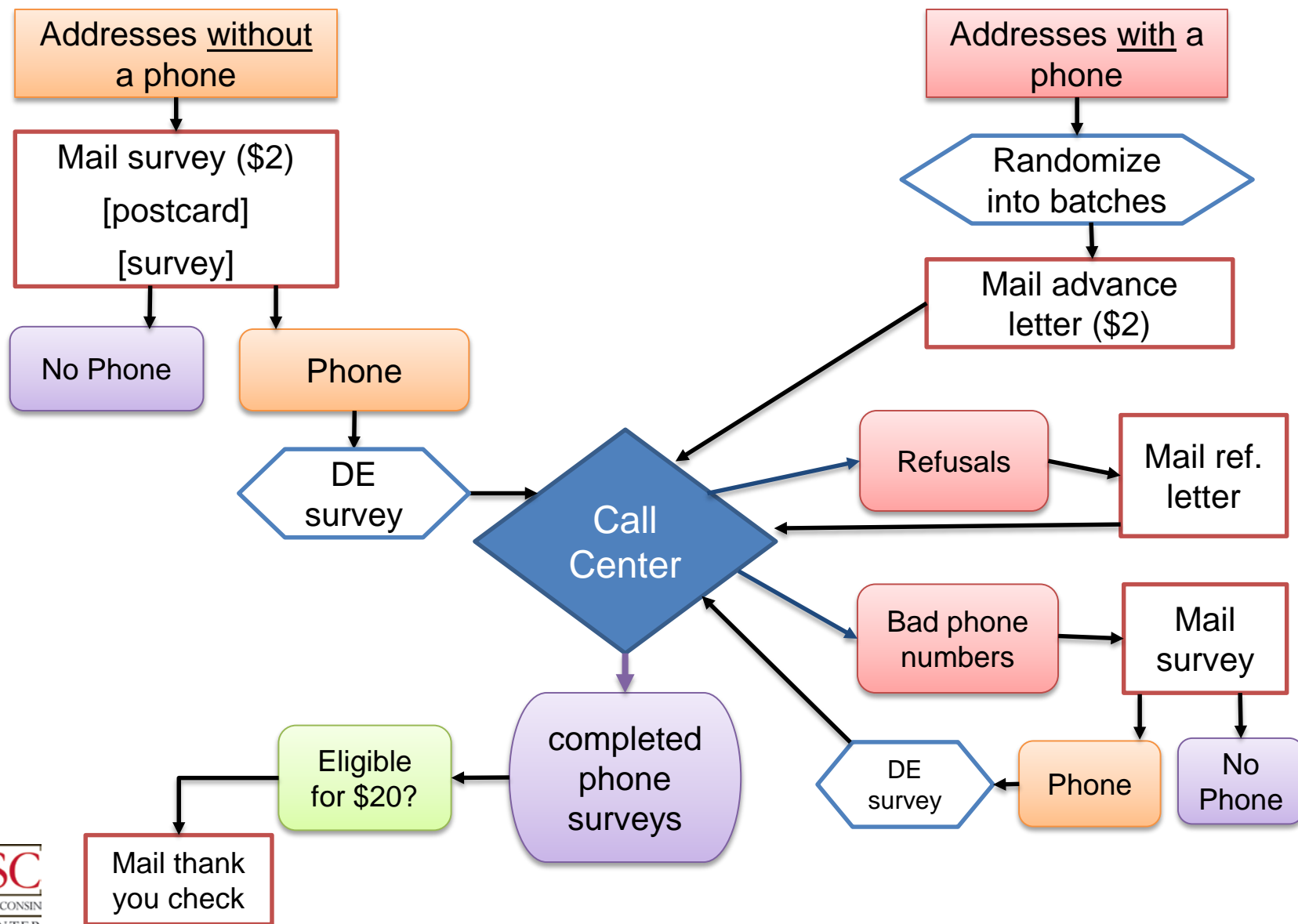
# Process for addresses with a phone number from vendor



# Process for addresses with a phone number from vendor



# Overview of the CATI data collection for address based sample for the Wisconsin Family Health Survey



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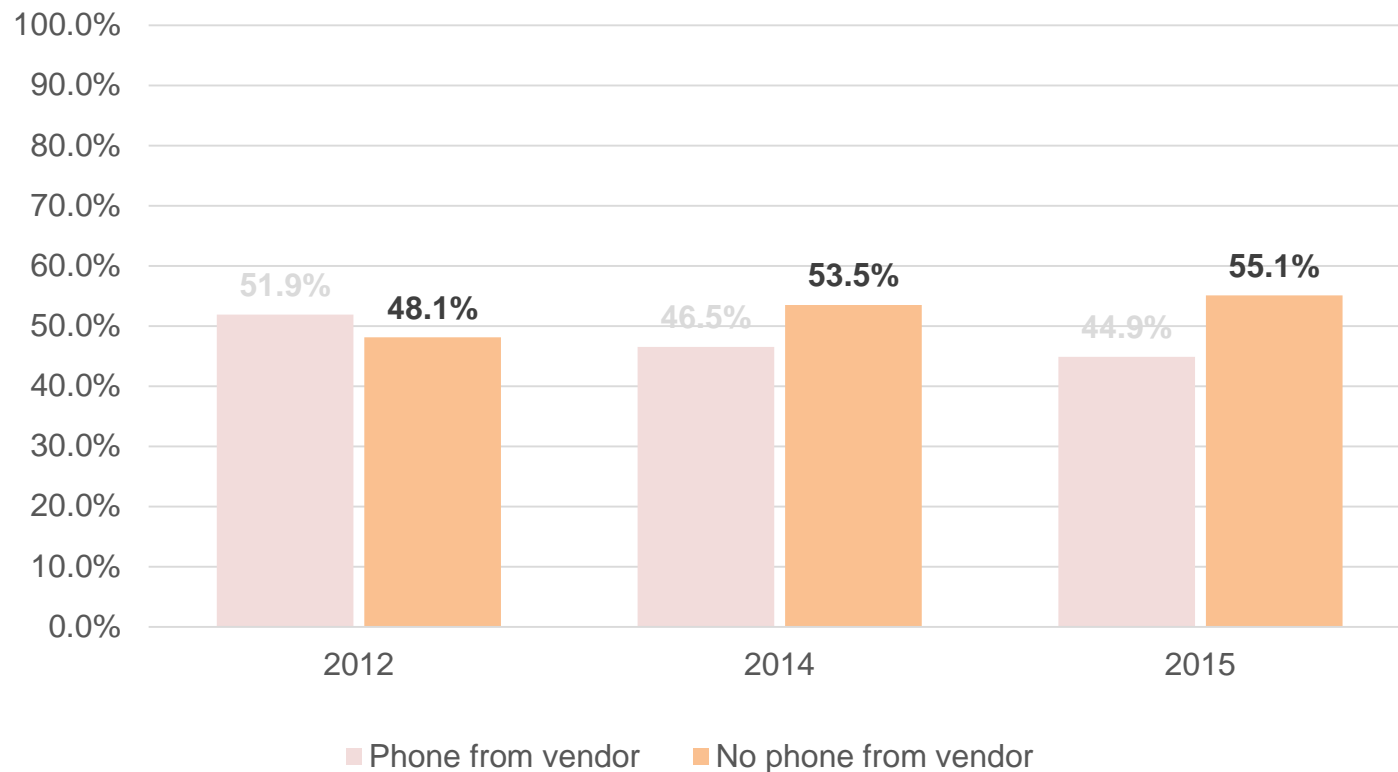
Summary



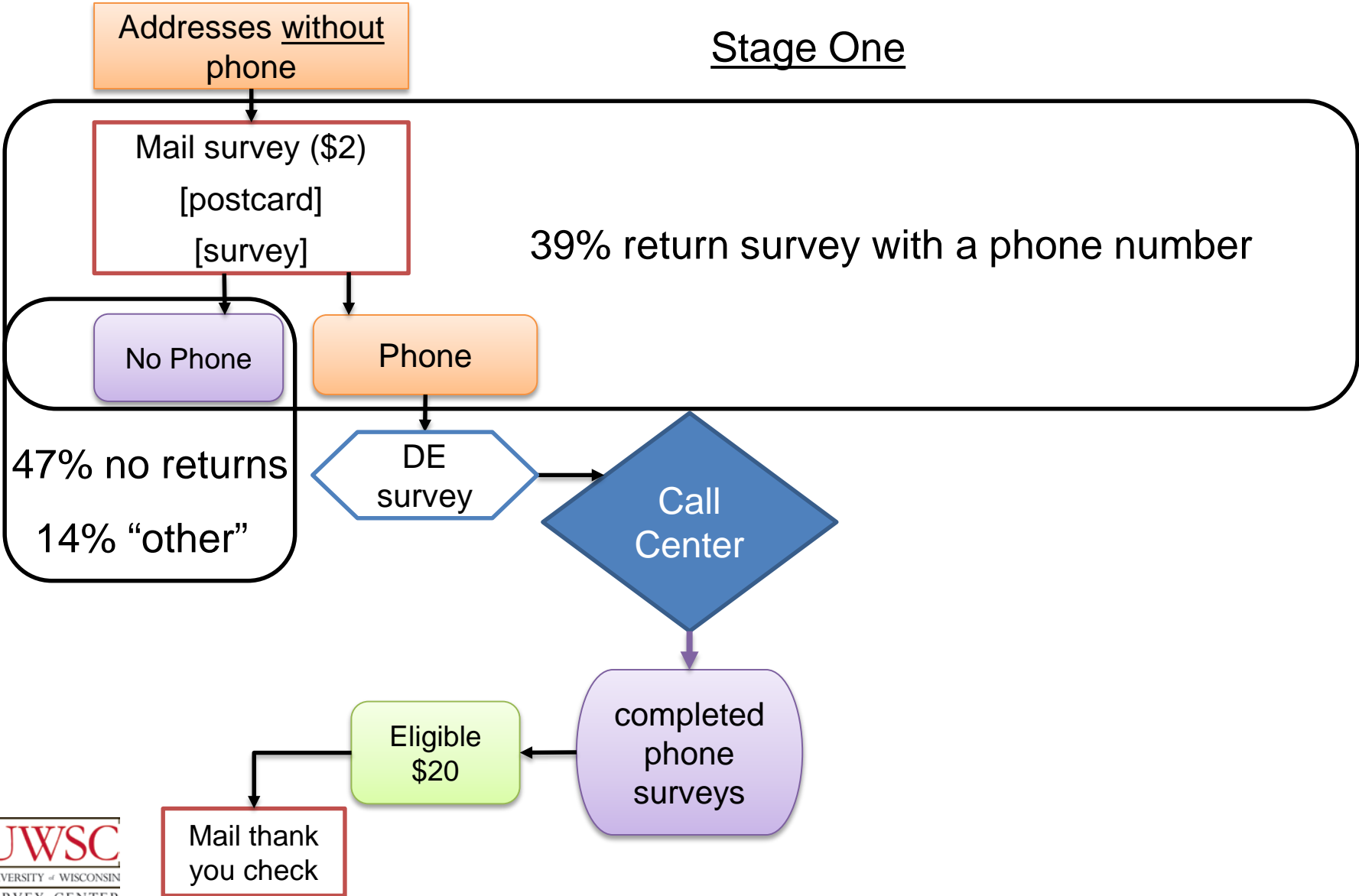
# Sampled address without a phone number by vendor

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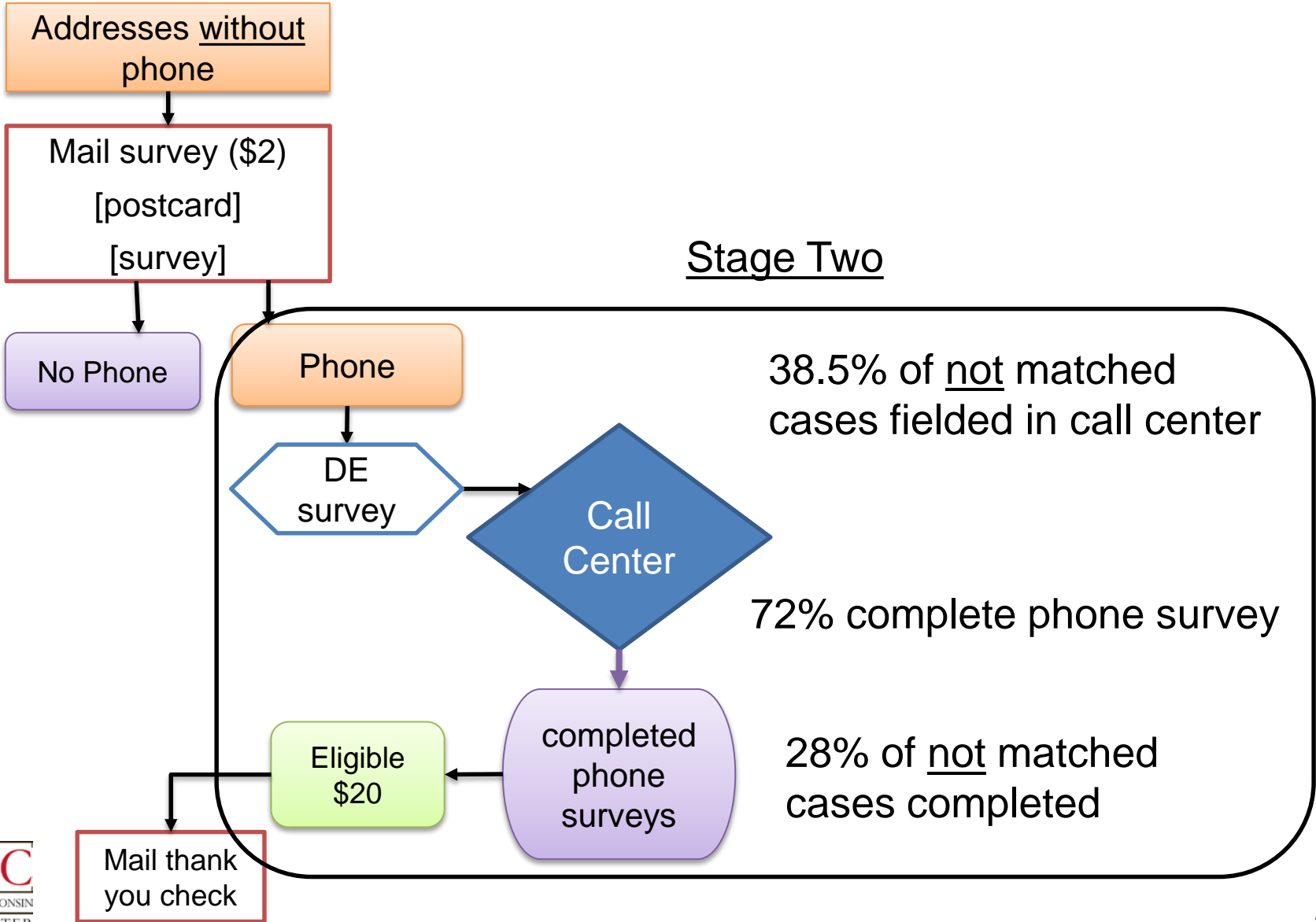
Percent of the sampled addresses not matched to a phone number by vendor



# Stage one outcomes for addresses without a vendor phone



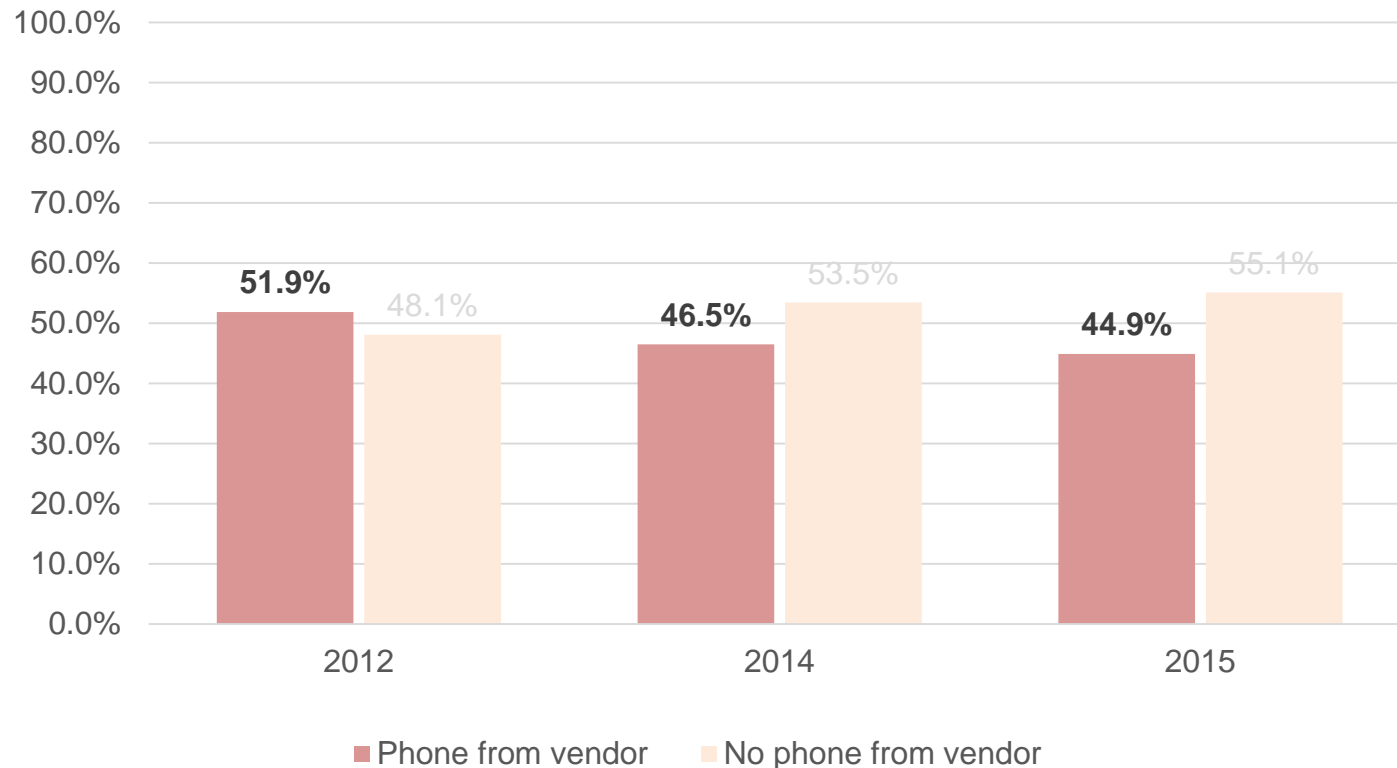
# Stage two outcomes for addresses without a vendor phone



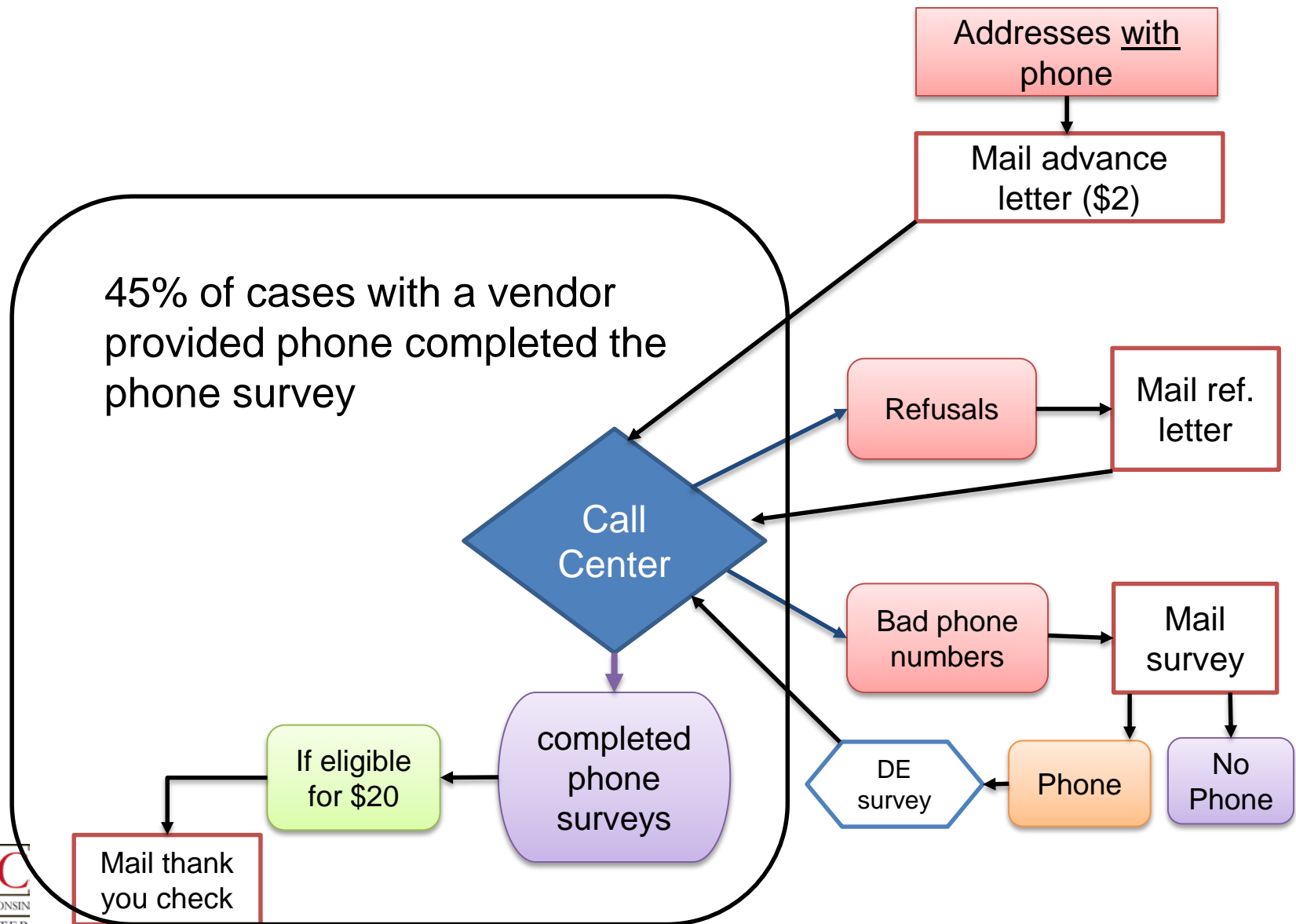
# Sampled address matched to a phone number by vendor

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Percent of sampled addresses with a phone number provided by vendor

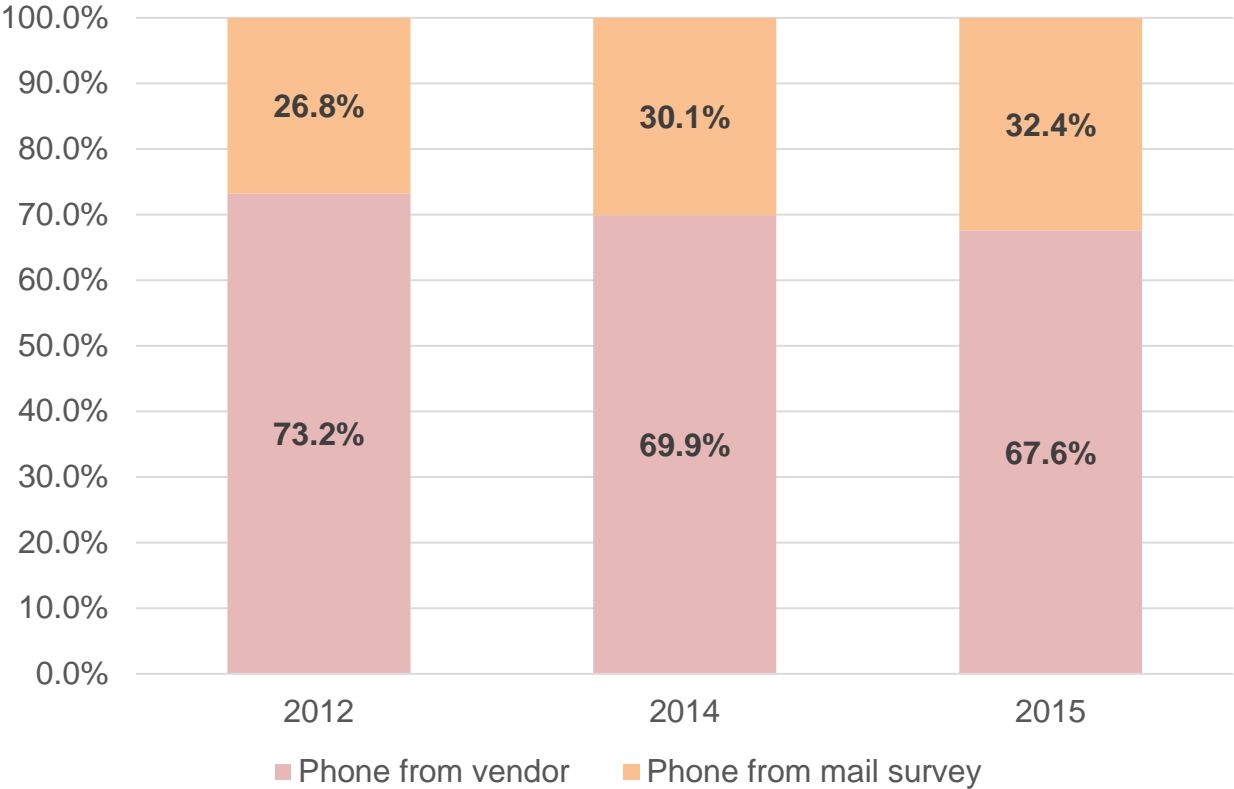


# Outcomes of addresses with a vendor provided phone number



# Distribution of cases fielded in the call center

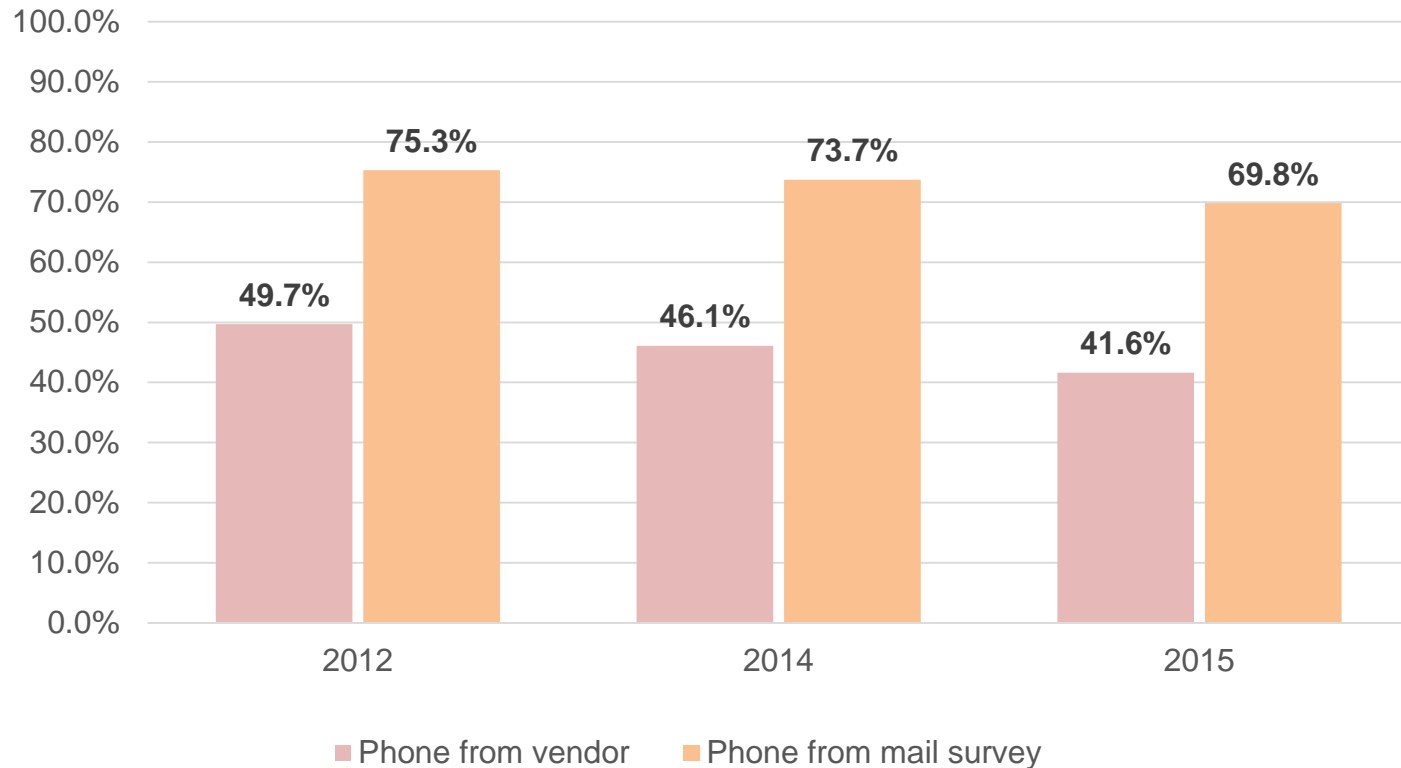
Percent of cases fielded in the call center, by source of phone number



# Completion rates for cases fielded in the call center

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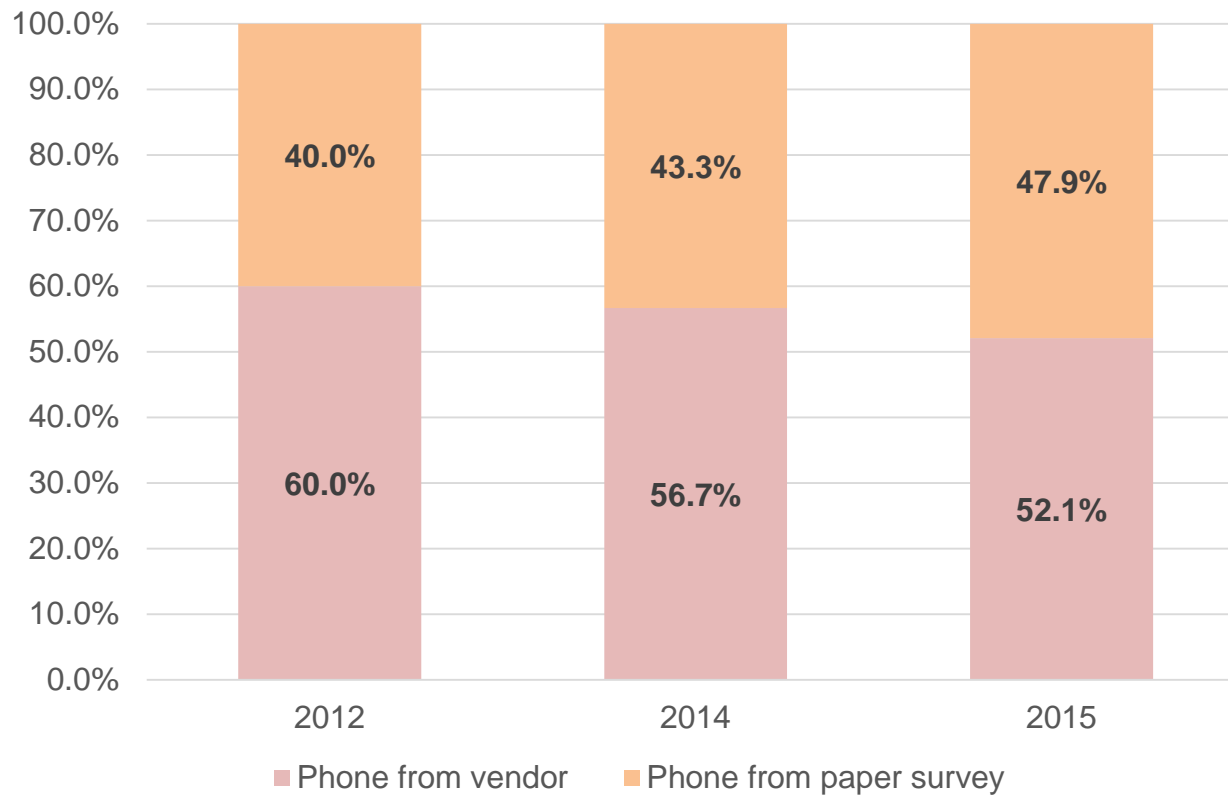
Percent of the cases fielded in the call center that result in a completed phone survey, by the source of the phone number



# Share of completed phone surveys

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## Percent of completed phone surveys by source of phone number





# Call center efforts to get a completed phone survey

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## Two Measures of effort

### Calls made per completed phone survey

- increasing number of calls to get one complete
  - up 20.4% overall, from 11.34 in 2012 to 13.65 in 2015
  - 30.3% increase among the cases matched to a phone by vendor
  - 15.2% increase among cases with a phone from mailed survey

### Hours on phone per completed phone survey

- a 62.6% increase in the number of hours on the phone per complete
  - from 0.9 hours in 2012 to 1.5 hours in 2015

# Contact, cooperation, and response rates

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	2012	2014	2015
Contact Rate 1	64.0%	58.1%	54.5%
Cooperation Rate 1	67.2%	65.4%	64.7%
Response Rate 1	43.0%	38.0%	35.2%

## Explaining the decline in the contact rate:

- Fewer cases with a vendor provided phone are being answered by a person
- Fewer cases without a vendor provided phone are returning the mailed paper survey

The decline has been much steeper among the cases with a phone provided by the vendor

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Fielding an address based sample for a telephone survey presents new possibilities, as well as challenges – *both new and old*.

- I. Address based sample expanded coverage of the sample frame
  - Bringing in more under represented survey respondents
- II. Increased complexity of fielding sample
  - Need multiple contact treatments to obtain phone numbers
  - More moving pieces that need to work together and to monitor
  - Increased field time needed for contacts via the mail
  - Increasing costs due to incentives and sample non-response, etc.
- III. Even with the use of multiple mailed contacts and incentives we still have a growing issue of non-response
- IV. Looking ahead: adding another mode of data collection may help, but..

Thank You!

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# Additional materials

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# Appendix

Percent of sampled addresses that ended in a completed phone survey over three years of data collection, by provided phone number and stratum

Strata	No phone from vendor	Phone number from vendor
Milwaukee majority minority	17.1%	30.9%
Other WI majority minority	22.2%	29.9%
Milwaukee balance	28.3%	41.5%
Big 8 balance	31.9%	49.1%
Medium counties balance	31.5%	48.7%
Small counties balance	33.3%	49.9%
<b>Overall</b>	<b>27.9%</b>	<b>45.2%</b>

# Review of Family Health Survey Sample Outcomes

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Yearly rates for address without a phone number from the vendor

	2012	2014	2015
Contact Rate 1	48.8%	44.1%	45.4%
Cooperation Rate 1	68.9%	66.8%	63.4%
Refusal Rate 1	8.0%	7.0%	5.2%
Response Rate 1	33.7%	29.5%	28.8%



# Review of Family Health Survey Sample Outcomes

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Yearly rates for addresses with a phone number from the vendor

	2012	2014	2015
Contact Rate 1	76.7%	73.6%	65.3%
Cooperation Rate 1	66.3%	64.5%	65.8%
Refusal Rate 1	19.9%	15.2%	8.4%
Response Rate 1	50.8%	47.4%	43.0%

# Sampled addresses per complete

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Addresses sampled per complete are on the rise

	2012	2014	2015
All sampled addresses	2.49	2.76	2.97
Addresses with a vendor phone	2.01	2.17	2.40
Addresses <u>without</u> a vendor phone	3.36	3.63	3.67

19.3% increase in the number of all addresses sampled to get a complete

- 19.4% for addresses matched to a phone number by vendor
- 9.2% for addresses that can not be matched to a phone by vendor