

Current and Future Uses of Address Lists for the National Health Interview Survey

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Presentation outline

Overview of the National Health Interview Survey (NHIS)

Recent NHIS sample augmentation

Use of address list for 2013 NHIS sample augmentation

2016 NHIS sample design: new source of sample addresses

The purpose of NHIS

To collect data on the health status and health services utilization of the U.S. civilian non-institutionalized population

To collect data on specific topics of current public health concern

To provide official national health data to the public

NHIS target population

Persons living in the 50 States and D.C. (not Puerto Rico, etc.)

Civilians (not active military)

Persons who live in households or non-institutional group quarters such as college dormitories (not persons living in institutional group quarters such as prisons)

NHIS interview protocol

Personal visit interviewing at sample addresses, using electronic questionnaire

Information is collected about all eligible persons of all ages at the sampled address

One adult and one child (if children present) randomly selected per family for more extensive questions

2011: NHIS began to receive supplemental funding

Supplemental funding provided for new NHIS questions, and for increasing NHIS sample

Focus was to enhance NHIS's ability to monitor the effects of the Patient Protection and Affordable Care Act, enacted in 2010

NHIS sample augmentation

**Augmentation in 32 states and the
District of Columbia**

**Purpose of targeted augmentation
was to increase sample sizes in
less populous states**

2011: 13% sample increase

2012: 21% sample increase

NHIS augmentation sources, 2011-2012

**Initial augmentation sources:
sample cut in previous years,
reserve sample assigned for years
beyond 2015**

**Another augmentation source
beginning in 2012: "subsamped-
out sample" (areas subsampled
out in existing primary sampling
units (PSU))**

We needed to find a new augmentation source for 2013 and beyond

**Initial augmentation sources
(sample cut in previous years,
reserve sample assigned for years
beyond 2015) exhausted by the
end of 2012**

**Subsampled-out sample source
not enough by itself to meet
augmentation targets**

Potential new augmentation source for 2013: new PSUs

**All previous augmentation
occurred in existing PSUs**

**Some less populous states had a
small number of PSUs**

**Some strata only had one sample
PSU selected initially**

2013 NHIS sample augmentation using new PSUs

**Research that allowed us to
expand to new PSUs: see Moriarity
and Parsons, 2013 Joint Statistical
Meetings proceedings
(forthcoming)**

**We needed to select sample of
addresses in the new PSUs**

Sample address source within new PSUs:

commercial address list

**Changes in Census Bureau survey
support systems to 2010 Census
geography ruled out traditional
NHIS field listing method**

**Acquired complete commercial
address list for areas in new PSUs**

Selected a sample of ~1000 blocks

Quality of commercial address list was unknown

**We compared address counts from
the commercial list by block to
2010 Census counts**

**We selected a ~50% subsample of
initial sample for field listing**

Future evaluation planned

Future assessment of commercial address list quality

Evaluation in blocks with both address list and field listing

Comparison of survey outcome in address list areas versus nearby field listing areas: percentage out of scope (non-residential, uninhabitable), etc.

NHIS sample address source, 1985-2015

**Sample addresses for the 1985-94,
1995-2005, and current NHIS
sample designs have come
primarily from field listing**

**The Census Bureau can share
NHIS sample addresses with NCHS**

**NCHS uses the NHIS addresses for
other surveys, record linkage, etc.**

2016 NHIS sample design: cannot afford previous address source

**Other demographic surveys
conducted by the Census Bureau
moving toward using the Master
Address File (MAF) as the main
source of sample addresses**

**NCHS has been sharing costs for
NHIS field listing; NCHS cannot
afford the full cost of field listing**

2016 NHIS sample design address source: address list(s)

**NCHS does not want to use MAF
addresses for NHIS because MAF
addresses are confidential, they
cannot be shared**

**NHIS will use one or more
commercial address lists as main
sample address source, beginning
in 2016**

Issues to address when using a commercial address list for NHIS

**Accuracy, geocoding quality,
coverage of areas like college
dormitories, etc.**

How to do periodic updates

**How to select annual samples that
do not overlap with previous ones**

2016 NHIS sample design will still include some field listing

Rural route/highway contract route/P.O. Box addresses not suitable for personal visit interviewing

Situations like a large apartment building with a single mail delivery point: listing likely needed at least part of the time

Summary

2013 NHIS sample augmentation led to first use of commercial address list (select areas)

Major change for 2016 NHIS sample design: most sample addresses will come from commercial address list(s)

2016 NHIS sample design will still include some field listing

Many questions remain for 2016