

# Bias in Estimates of Non-Group Health Insurance Coverage: Comparison of Surveys and Administrative Data

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**Rutgers** Center for  
State Health Policy

Joel C. Cantor, ScD\*  
Alan C. Monheit, PhD\*^  
Susan Brownlee, PhD\*  
Carl Schneider, MA\*

\*Center for State Health Policy, Rutgers University

^School of Public Health, University of Medicine and Dentistry of NJ

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# BACKGROUND



# The Non-Group Health Insurance Market

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- Coverage of last resort for persons without access to employer or public sources
- Fragile market
  - Subject to adverse risk selection, high variance in expenditures, high administrative costs, & premiums
  - Insurers limit access/raise cost for high-risk persons
- States regulate access and premium rating
- CPS is the key source to evaluate non-group policy

# Why Discuss Non-Group Coverage in a Meeting about Medicaid?

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- Medicaid/SCHIP rely on private managed care plans
- Seeking to avoid stigma, Medicaid/SCHIP marketed to feel like “private” coverage
- CPS “purchased directly” question wording
- Evidence that public eligibility expansion is associated with higher reporting of non-group coverage in the CPS (LoSasso and Buchmuller, 2002)

# SCHIP Effect on Non-Group Estimates?

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- CPS 1996-2000
- Modeled probability of having insurance coverage as a function of variation in SCHIP eligibility thresholds
- 4%-10% net impact on coverage among income-eligible
- 2%-3% decline in *group* coverage (i.e., “crowd out”)
- But, new SCHIP eligibility was associated with 2% increase in reporting of *non-group* coverage

Source: LoSasso AT and TC Buchmuller. “The Effect of the State Children’s Health Insurance Program on Health Insurance Coverage.” NBER Working Paper 9405. December 2002. [www.nber.org/papers/9405](http://www.nber.org/papers/9405)

# STUDY QUESTIONS

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- **Does the CPS accurately measure enrollment in non-group health insurance coverage?**
- **If not, does it inappropriately include Medicaid/S-CHIP enrollees in non-group coverage?**

# METHODS

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- Compare NJ non-group enrollment trends, 1997-2002
  - Current Population Survey
  - Aggregate insurer reports to state regulator
  - National Survey of America's Families (NSAF)
  - New Jersey Family Health Survey (NJFHS)
- Contrast characteristics of non-group enrollees
  - Survey based on list sample of non-group enrollees
  - NSAF and NJFHS



# DATA SOURCES

Data Source Name and Sponsor	Sampling	Mode	NJ Response Rate	Total Sample Size	Non-Group Sample Size <sup>a</sup>	Coverage Question Time Frame
<b>Current Population Survey</b> <sup>b</sup> <i>US Census Bureau and Dept. of Labor</i>	Area Probability	In-person & phone	92.8% (US)	3,337	216	Prior year
<b>National Survey of America's Families, 1997 &amp; 1999 (NSAF)</b> <sup>c</sup> <i>Urban Institute</i>	Random Digit Dial	Phone <sup>d</sup>	50.6%	7,272	254	Current
<b>New Jersey Family Health Survey, 2001 (NJFHS)</b> <i>Rutgers Center for State Health Policy</i>	Random Digit Dial	Phone <sup>e</sup>	59.3%	6,466	211	Current
<b>Individual Health Coverage Program NJFHS–Supplement, 2002 (List Sample)</b> <i>Rutgers Center for State Health Policy</i>	Carrier Lists (95% of subscribers)	Phone	52.0%	1,398	882	Current
<b>Individual Health Coverage Program Administrative Data</b> <i>NJ Department of Banking and Insurance</i>	NA	Carrier Reporting	NA	NA	NA	During quarter

a Persons under age 65 only.

b Based on March 2002 survey.

c Based on 1999 survey.

d Includes small in-person sample of families without telephones.

e Includes telephone non-coverage history adjustment.

# Non-Group Survey Questions

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## Current Population Survey

Were you/family members “covered by a plan that [you] PURCHASED DIRECTLY, that is, not related to current or past employer” during the prior year?

## NSAF & NJFHS

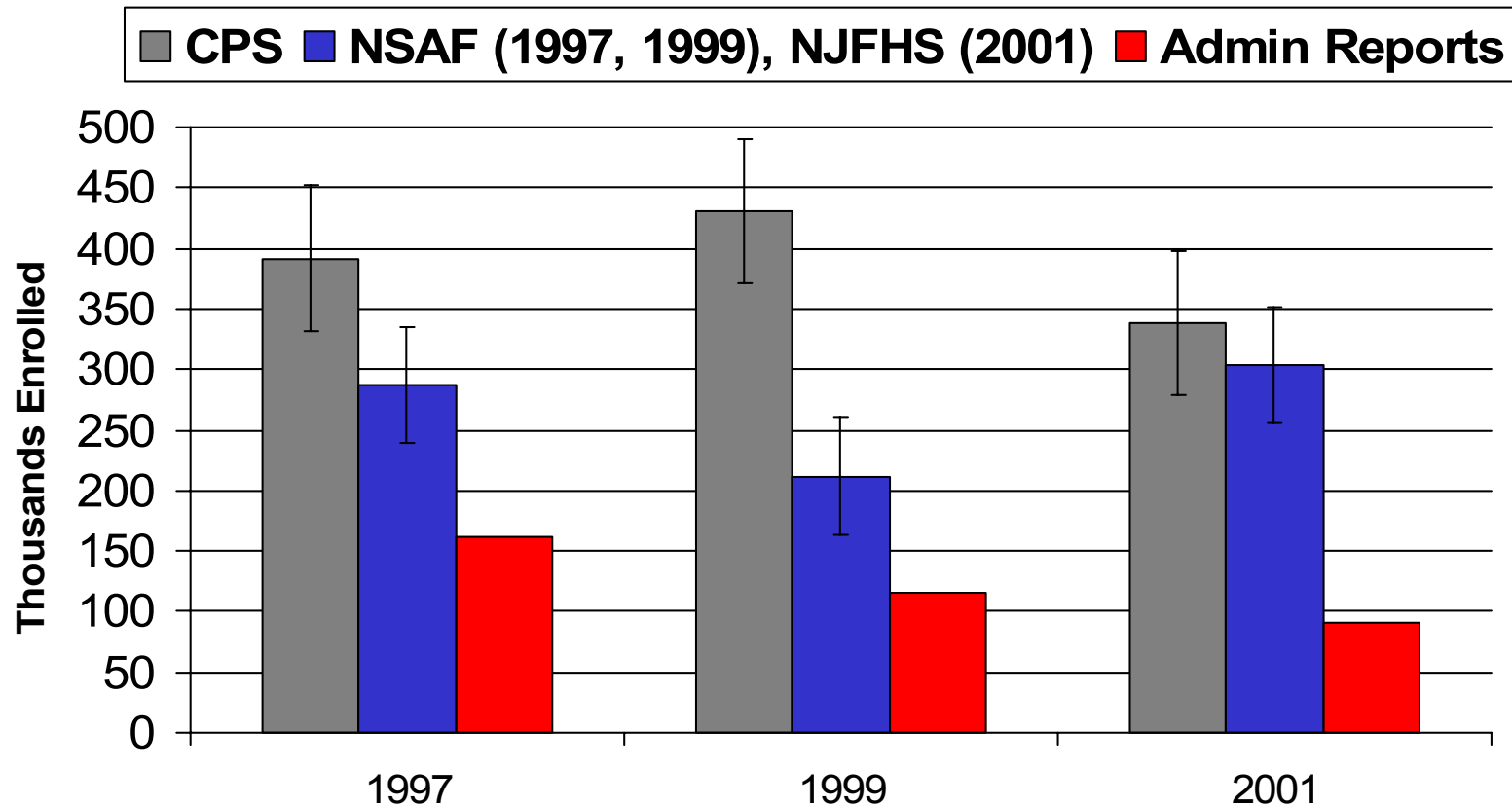
“At this time, is anyone in your family covered by a health plan that is purchased directly from an insurance company or HMO, that is, not from a current or past job?”

# FINDINGS



# New Jersey Non-Group Enrollment

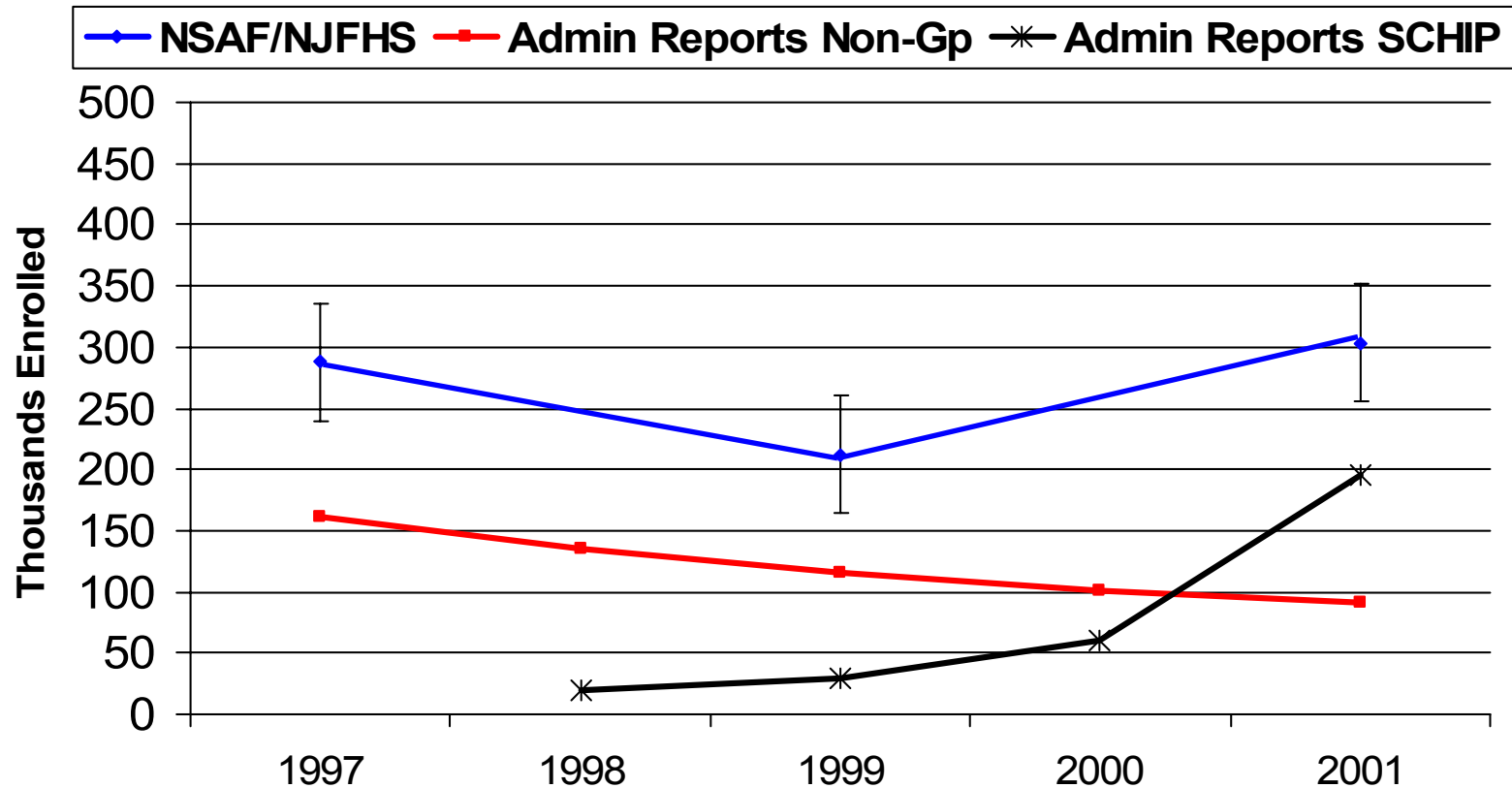
## Contrast of Data Sources, Non-Elderly



Note: 95% Confidence interval bars are approximate

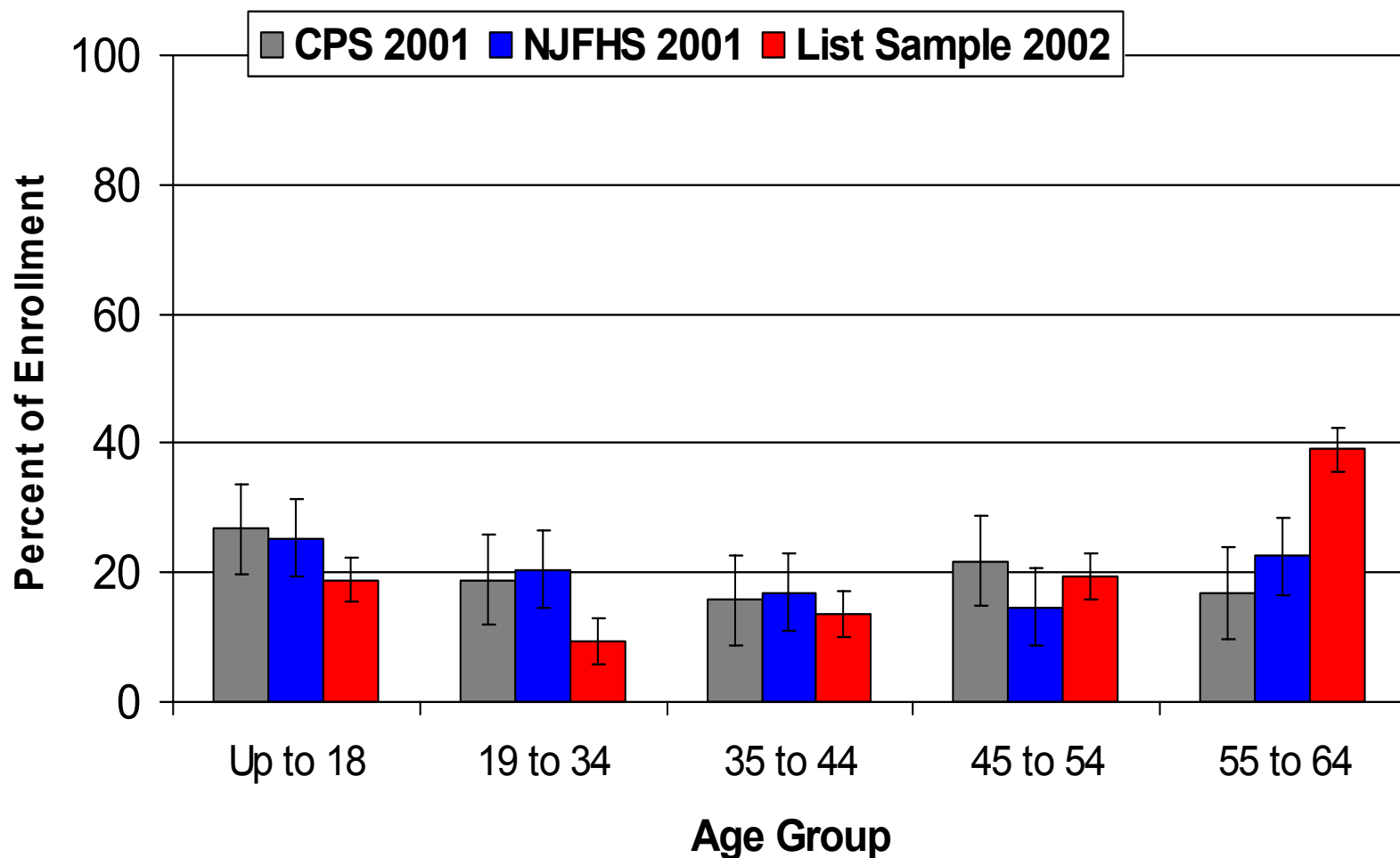
# Non-Group Compared to SCHIP Enrollment

NSAF/NJFHS and Administrative Sources, Non-Elderly



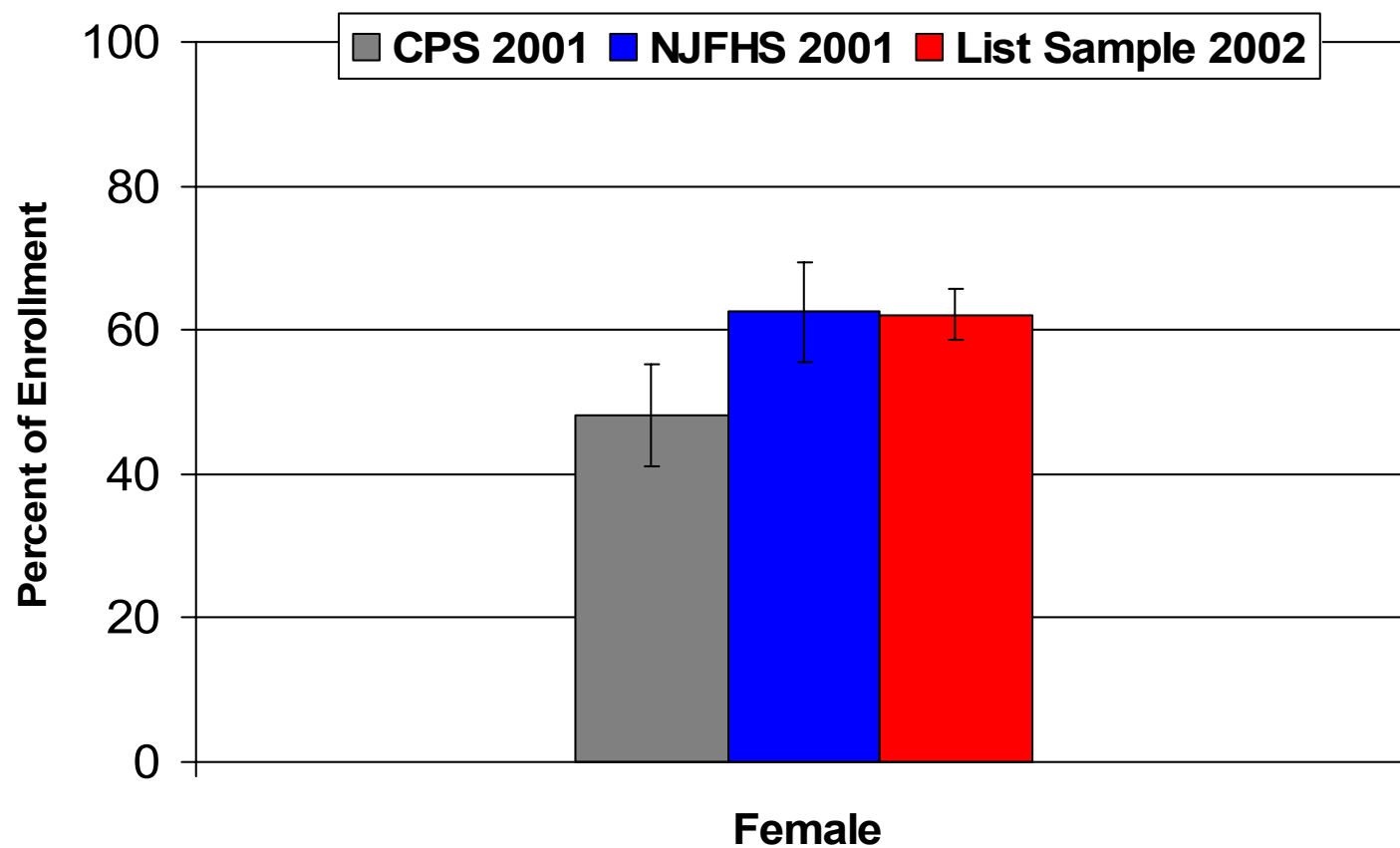
Note: 95% Confidence interval bars are approximate

# Age Distribution of Non-Group Enrollees

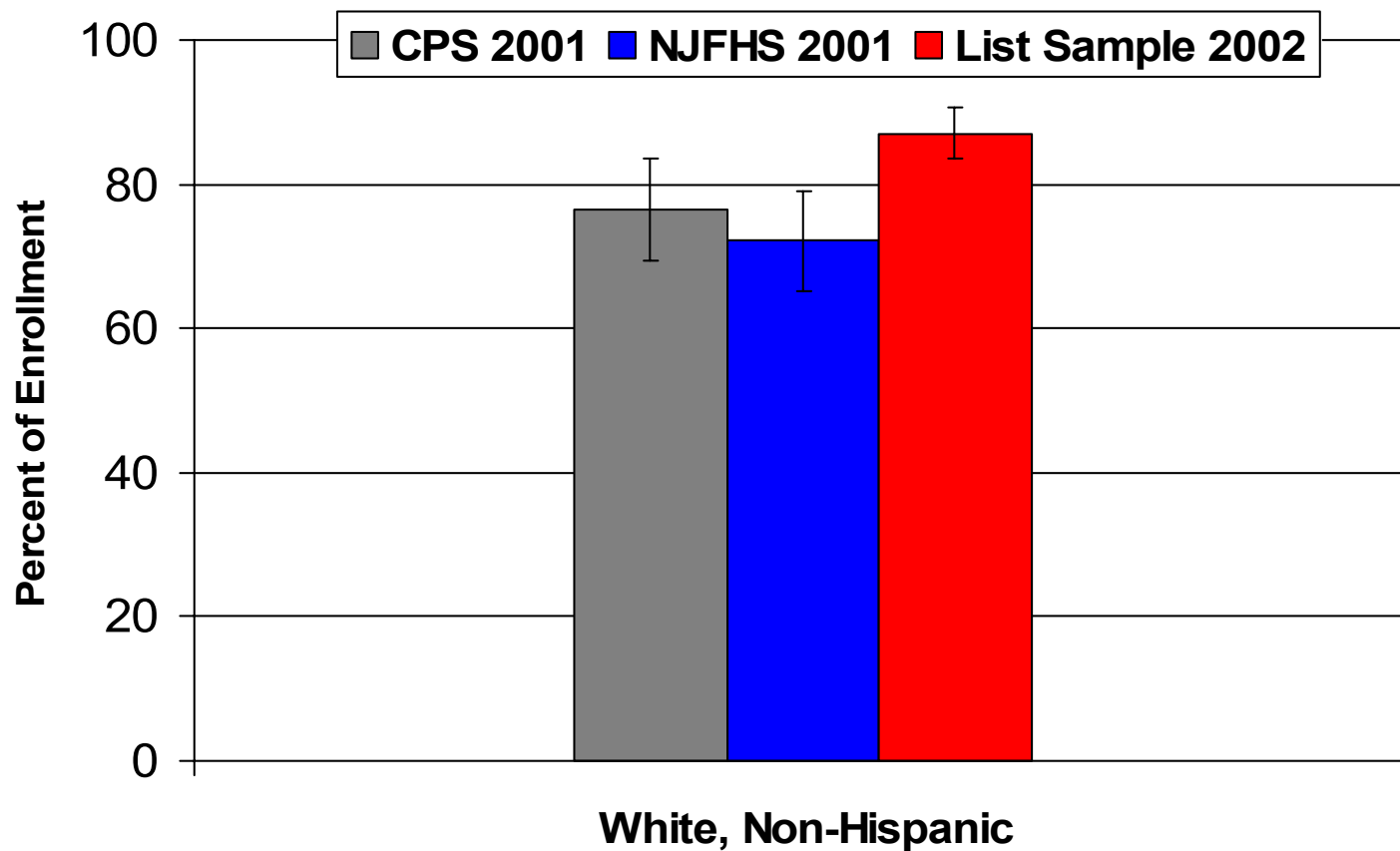


Note: 95% Confidence interval bars are approximate

# Female Non-Group Enrollees



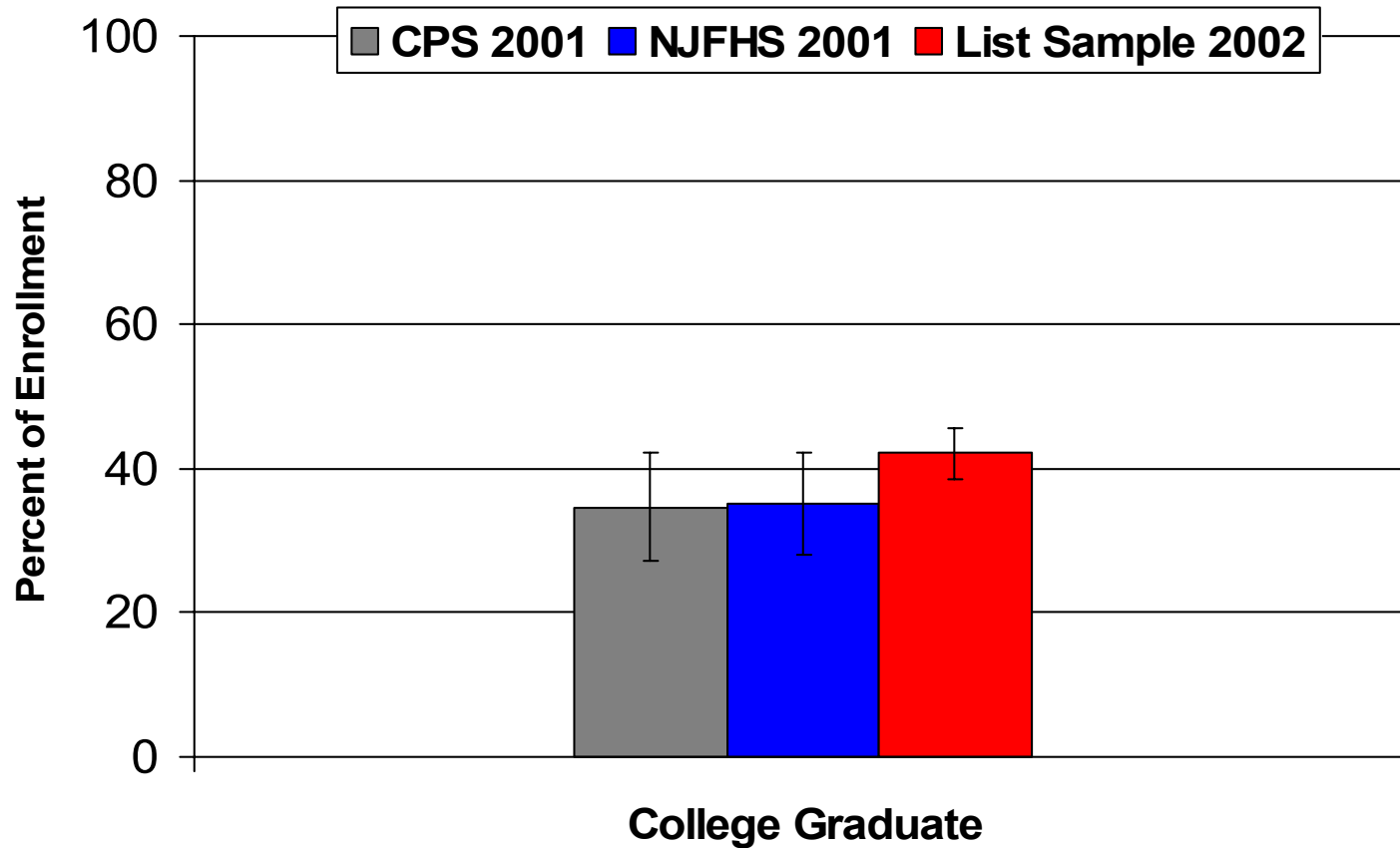
# White Non-Hispanic Non-Group Enrollees



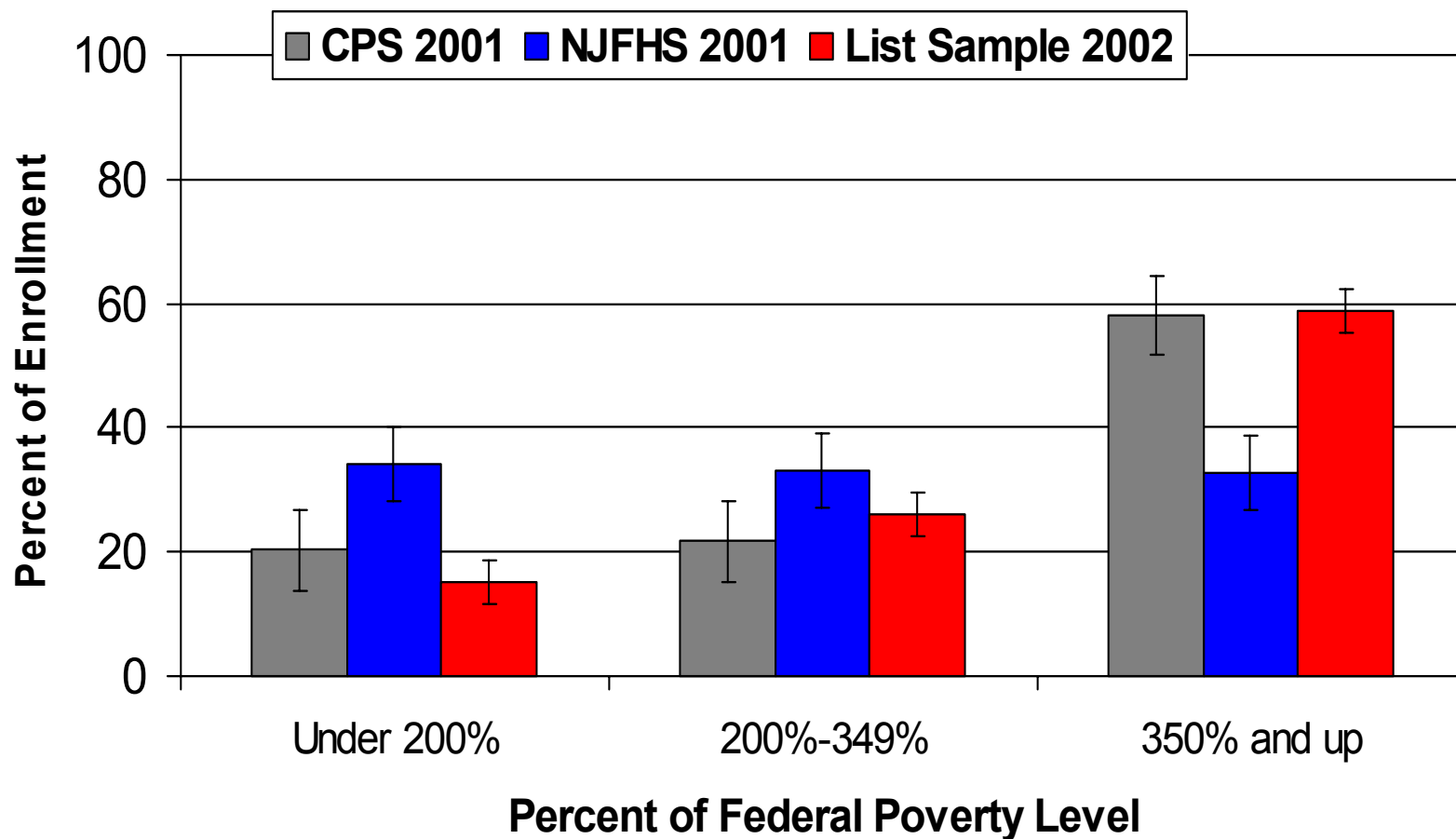


# College Graduate Non-Group Enrollees

Ages 21-64



# Poverty Status of Non-Group Enrollees



Note: CPS uses a more comprehensive measure of income

**CONCLUSIONS,  
IMPLICATIONS,  
&  
OPTIONS**



# CONCLUSIONS (1)

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- Surveys overstate non-group enrollment compared to administrative data
  - CPS overstates more, perhaps due to annual timeframe
- Point-in-time survey estimates trend with non-group *plus* SCHIP enrollment
  - Consistent with SCHIP misreporting hypothesis

# CONCLUSIONS (2)

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- Compared to general probability sample, more non-group enrollees in the list sample are:
  - Older
  - Female (versus CPS only)
  - Non-minority
  - College graduates (n.s.)
  - Higher income (versus NJFHS only)
- Consistent with SCHIP misreporting hypothesis

# IMPLICATIONS

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- CPS may significantly understate SCHIP take-up and bias crowd-out estimates
  - Consistent with LoSasso and Buchmeuller
- CPS-based evaluation of non-group policy is potentially confounded by SCHIP changes/variations

# OPTIONS

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- Edit data, assume child-only “direct purchase” coverage is Medicaid/SCHIP
  - Partial solution
- Confirm source of coverage by examination of insurance card
  - In-person only, time consuming
- Follow report of “directly purchased” coverage with question about source of coverage, e.g.:
  - “Is this coverage part of a program such as NJ FamilyCare or Medicaid?”

# Results of a Small Experiment

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- Household survey in New Brunswick, New Jersey, 2004
  - N=595 households
  - Low income community, 50% Hispanic, high-immigration
- Follow-up to “Direct Purchase” question:
  - 37 HHs reported having direct purchase
  - Of these, 12 (32%) responded that it was Medicaid or FamilyCare
  - Translates (weighted) to **misclassification** of...
    - **27% of non-elderly adults**
    - **70% of children**