

Who gets it right? Characteristics associated with accurate reports of health insurance coverage

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Goals of this study

- Describe correlates of accurate reports of insurance coverage in two commonly used census surveys:
 - Current Population Survey ASEC (CPS)
 - American Community Survey (ACS)
- Identify variation in correlates of accurate reporting of coverage by
 - type of insurance (public or private) and
 - survey (ACS and CPS)

Why do correlates of accuracy matter?

Results can inform

- Survey design
- Editing or imputation routines
- Adjustments to population estimates of coverage for policy simulation and evaluation

Who gets it right?

- What is known is limited to **Medicaid** reporting
- Most accurate:
 - Adults reporting for children vs adults
 - Low income, unemployed, low education
 - Shared coverage
 - i.e., respondent shares same coverage as other HH members
 - Received medical care
 - Recency, intensity of coverage
- Here we expand to private insurance

Data: CHIME validation study

- Start with enrollment records from a private health plan that offers multiple coverage types
 - Medica Health Plan (MHP) in Minnesota
- Use records as sample and randomly assign to different survey treatments
 - Current Population Survey ASEC (CPS)
 - American Community Survey (ACS)
- Compare estimates/indicators of coverage type:
 - Survey estimates versus enrollment records
 - Difference in surveys and records across CPS and ACS

CHIME survey methods

- 15-minute phone survey conducted in Spring, 2015
- Content: questions from both CPS and ACS:
 - Demographics
 - Labor force
 - Government program participation (food stamps, WIC, etc.)
 - Health insurance randomization



- Stratified sample: oversampled public, undersampled ESI → weight data to Medica population totals
- 22% response rate (AAPOR RR4)
- Data collected on all household members
- Individuals in surveys matched to enrollment records: at least one person matched in 87% of households
- Final matched dataset: 3,823 people
 - 1,989 received CPS
 - 1,834 received ACS

Potential correlates of accurate reporting

From CHIME survey:

- Covered individual characteristics
 - Age, health status
 - Any services in past 6 months (**claims data, public only**)
- Respondent characteristics
 - Gender, education and employment status, employer size, family income, and
 - Policy holder status (**claims data**)
- Family/HH characteristics
 - Income as % poverty
 - Any SSI/TANF or food stamp participation (**Medicaid only**)

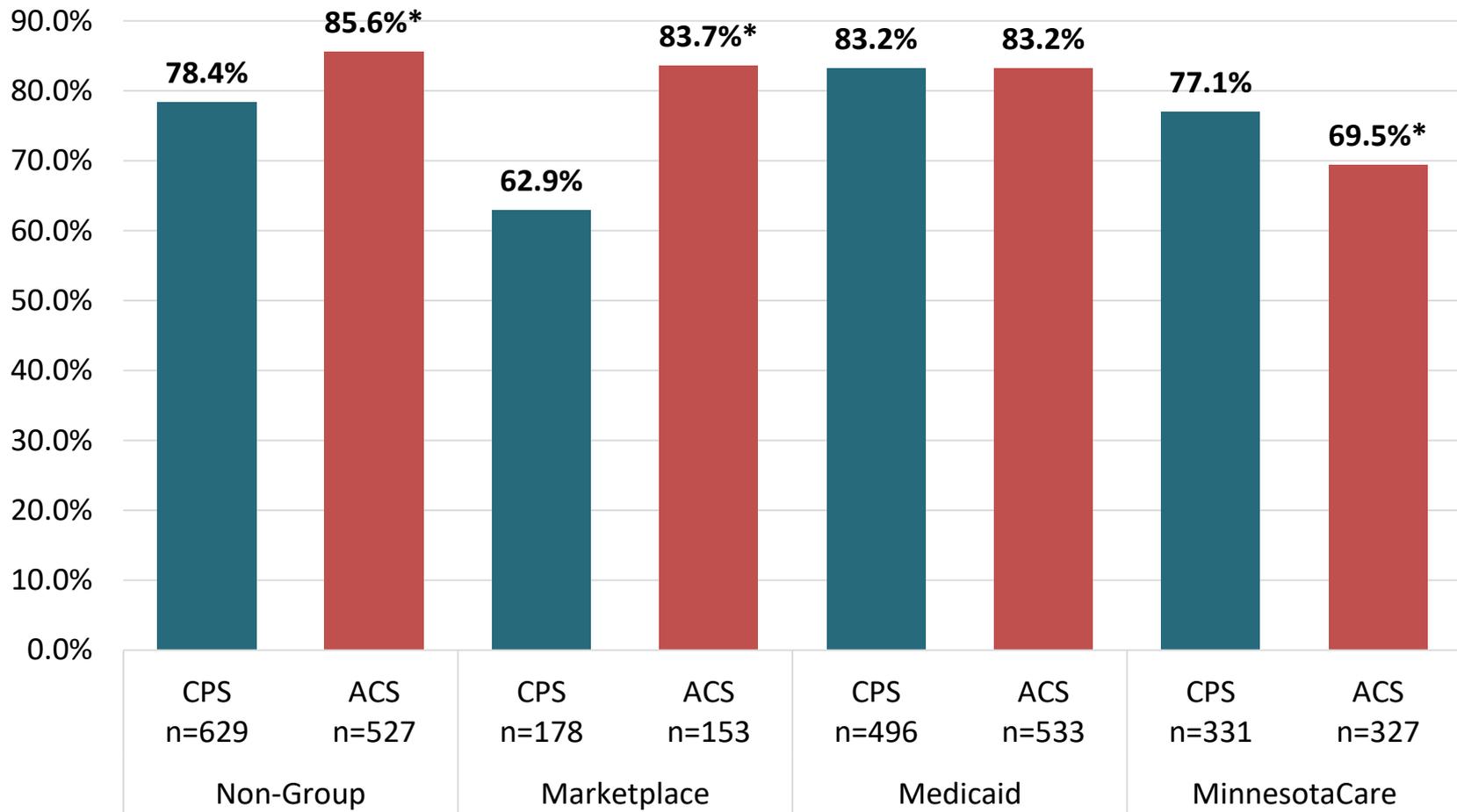
Potential correlates continued

From administrative records:

- Complexity of survey reporting task
 - Shared coverage
 - Proxy-report in multi-person HH w/ different coverage
 - Proxy-report in multi-person HH w/ same coverage
 - self-report in multi-person HH
 - Self-report in one-person HH
 - Recency of coverage
 - past 6 mos, 7-17 months, 18 months or more
- Receipt of subsidy (marketplace only)

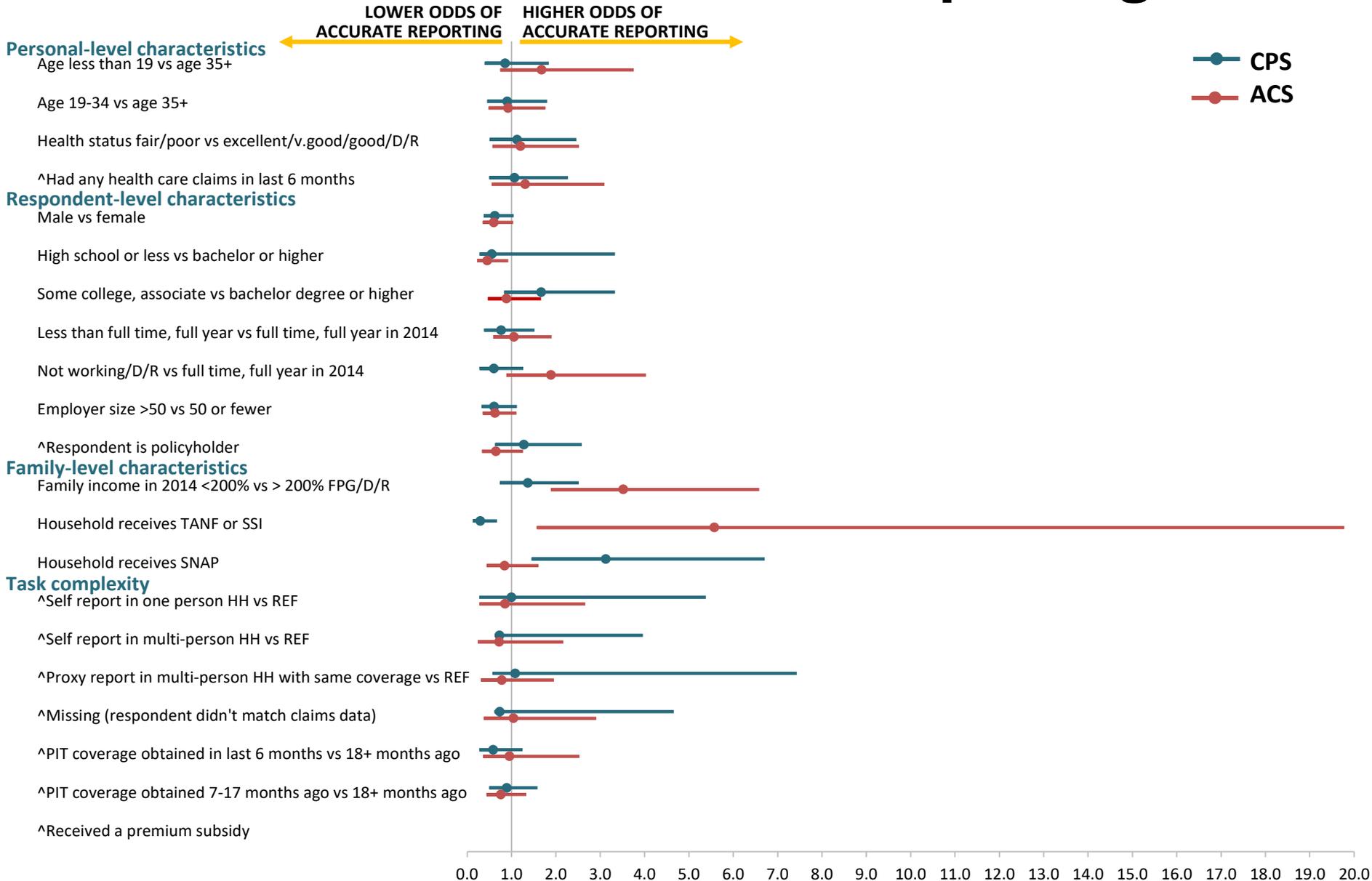
Reporting accuracy by insurance type and survey treatment

■ CPS
■ ACS



* Indicates a significant difference between CPS and ACS $p < .05$ or better.

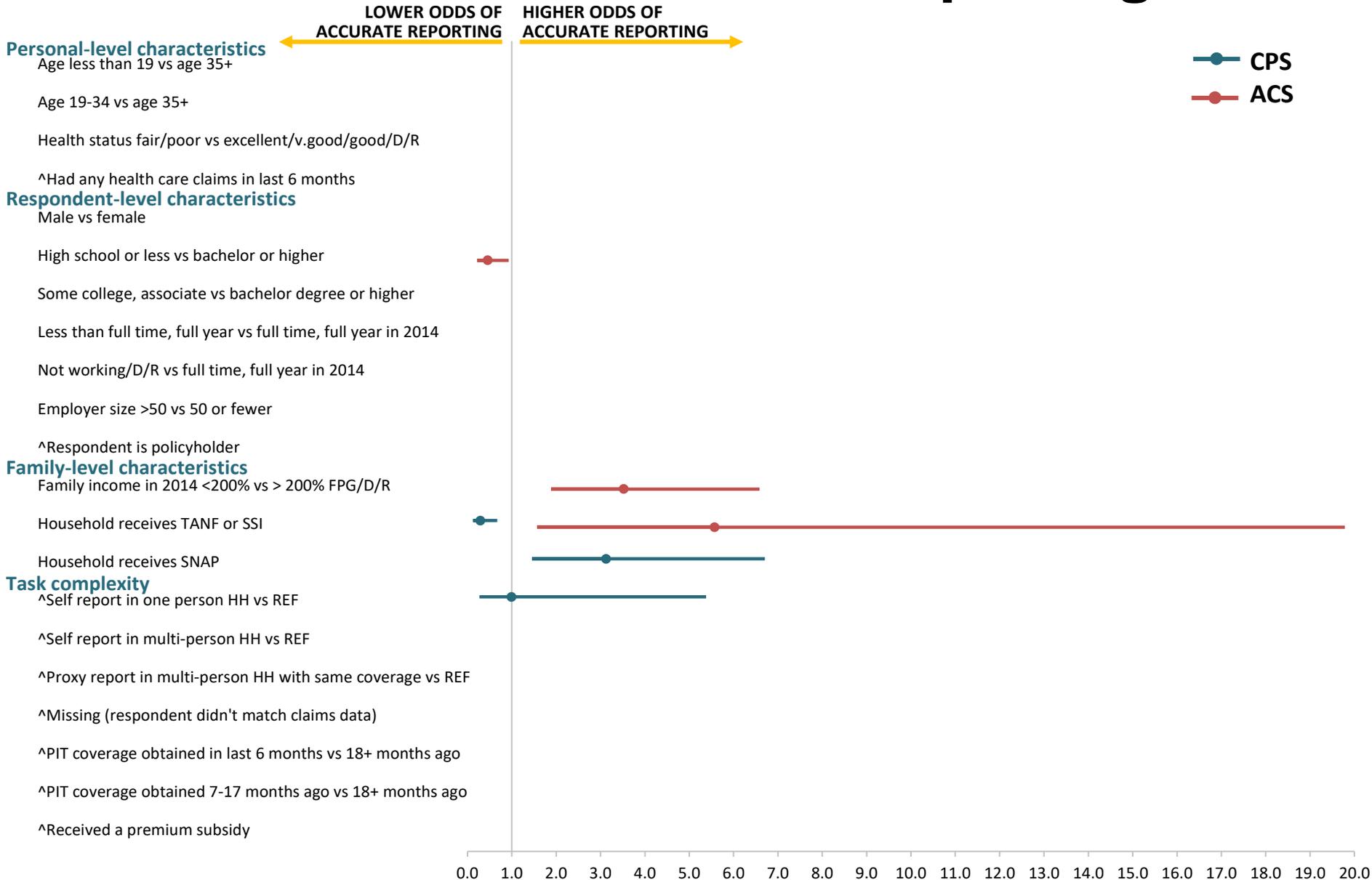
Odds of accurate Medicaid reporting



REF=Proxy report in multi-person HH with different coverage

^ Based on administrative records data; all other indicators are from survey data.

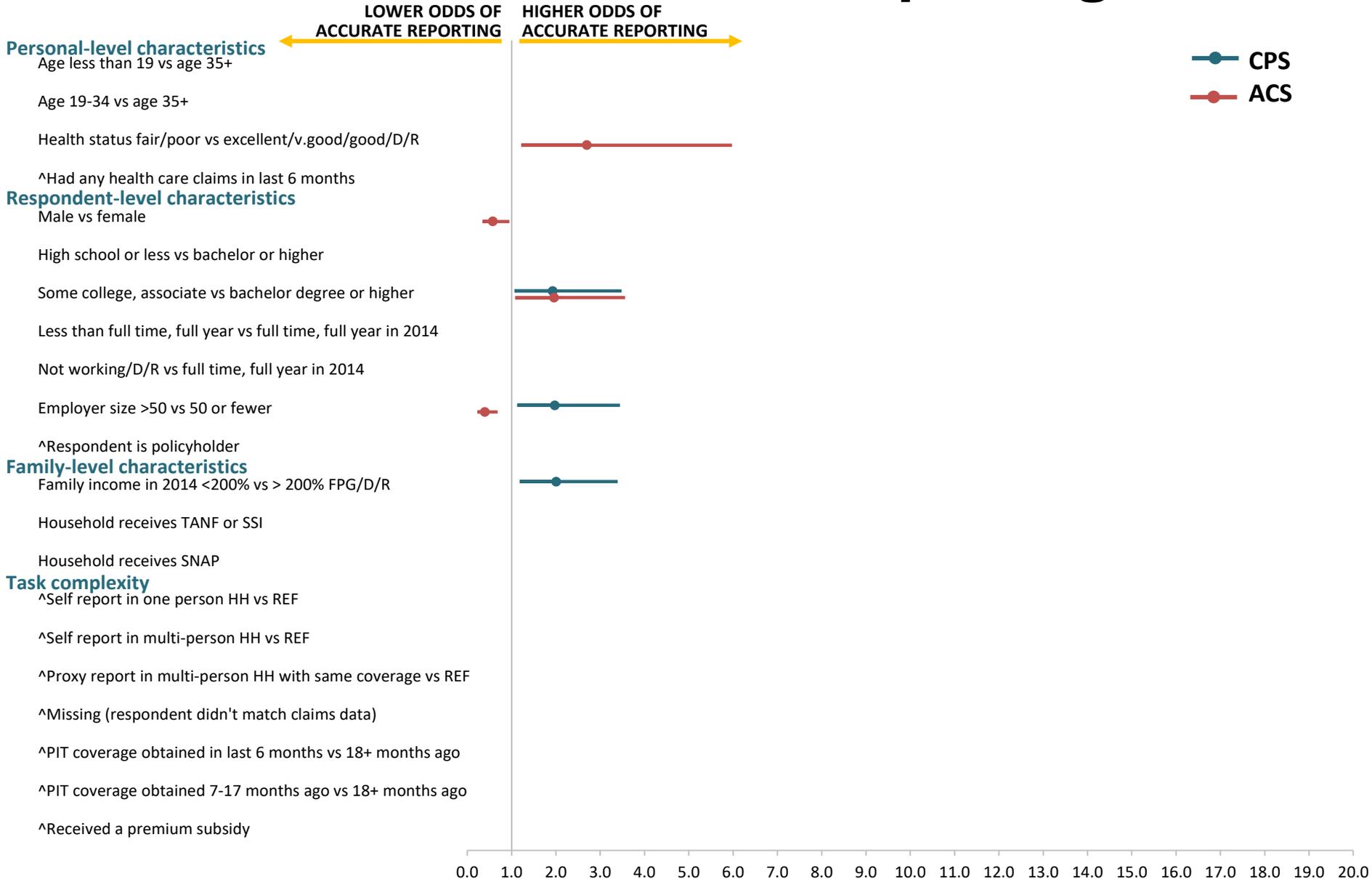
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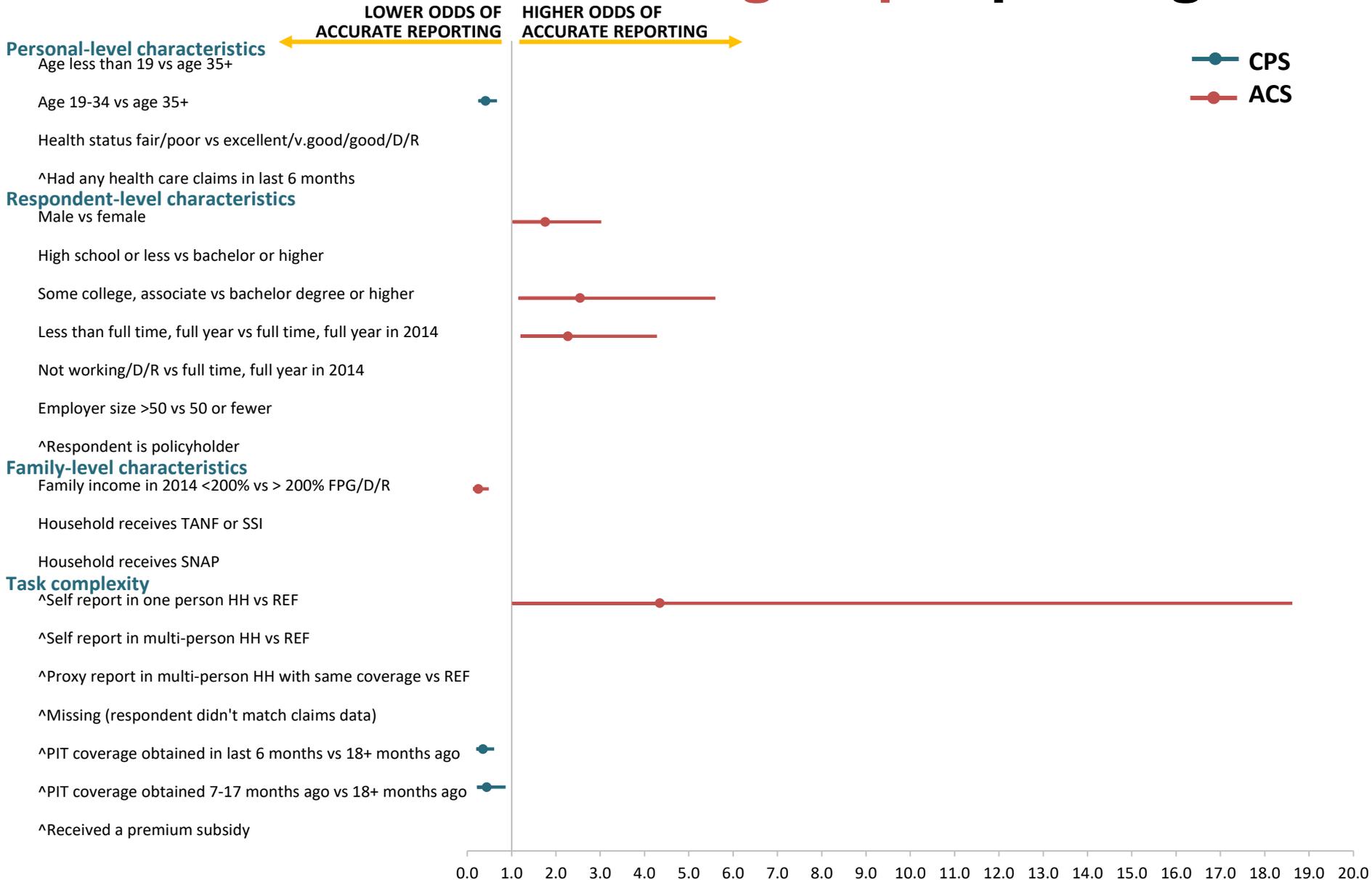
Odds of accurate MNcare reporting



REF=Proxy report in multi-person HH with different coverage and missing (respondent didn't match)

^ Based on administrative records data; all other indicators are from survey data.

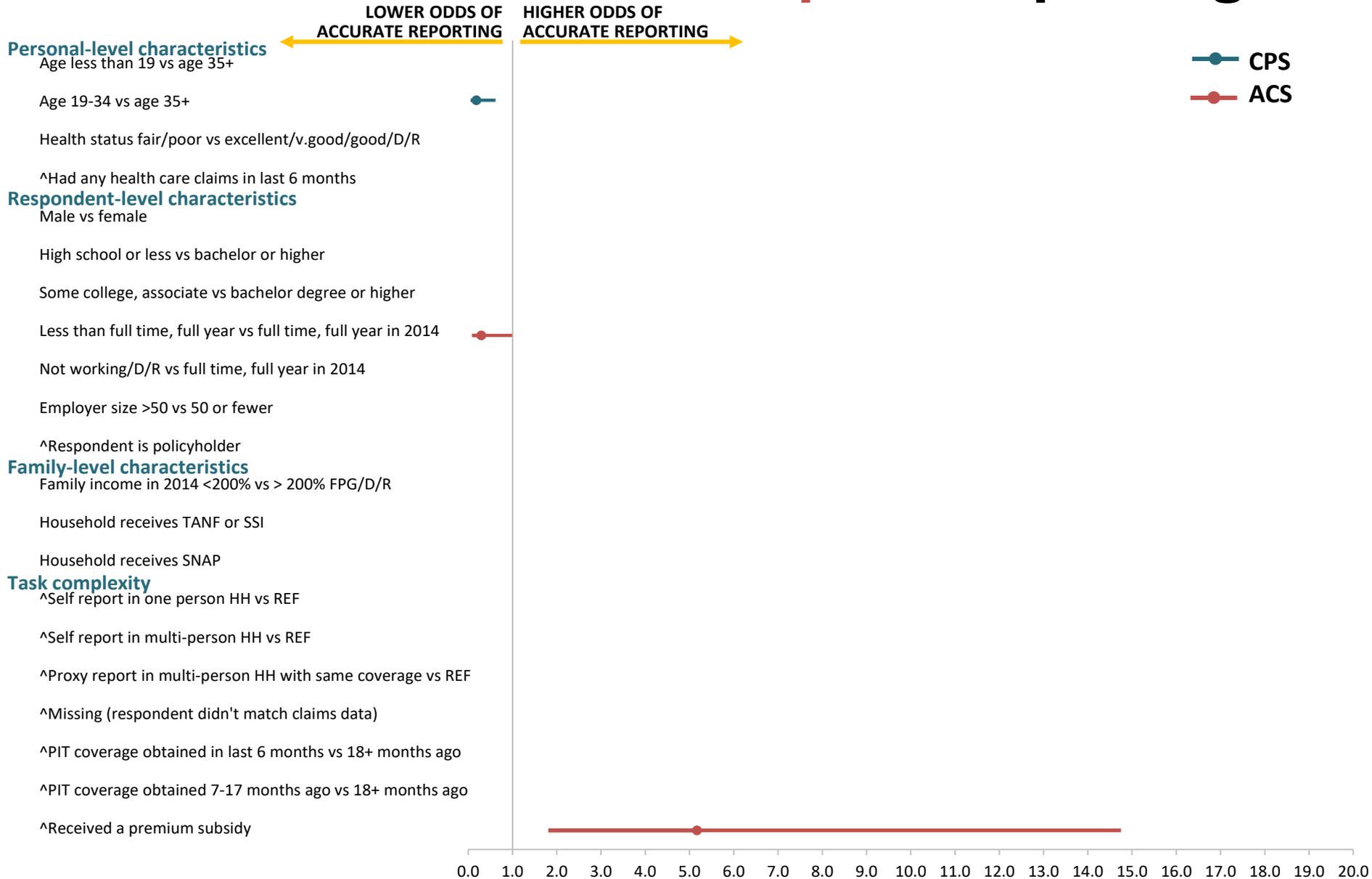
Odds of accurate **Non-group** reporting



REF=Proxy report in multi-person HH with different coverage and missing (respondent didn't match)

^ Based on administrative records data; all other indicators are from survey data.

Odds of accurate Marketplace reporting



REF=Proxy report in multi-person HH with different coverage and missing (respondent didn't match)

^ Based on administrative records data; all other indicators are from survey data.

Summary of results

- Consistent with prior research **public** reporting is more accurate among
 - less social/structurally advantaged:
 - Low income and education
 - those with experience with other social programs and who likely need care
 - TANF/SSI and SNAP recipients
 - Fair/poor self-reported health
- Variation across public programs
 - For Medicaid, family-level characteristics matter
 - For MNcare, respondent-level characteristics matter

Summary continued

- **For ACS, private** reporting is more accurate among
 - more social/structurally advantaged
 - Males, higher income
 - those less likely to have ESI offer
 - Part-time/part-year, modest educational attainment
 - those with less task complexity
 - Living alone and reporting for self
 - those receiving a subsidy in Marketplace plan
- **For CPS, private** reporting is more accurate among
 - those age 35 plus vs age 19-34
 - those with long duration of same coverage

Conclusions

- CHIME is first look at correlates of accurate reporting for ACS, CPS redesign, direct purchase and marketplace
- Although significant correlates are sparse, there patterns:
 - CHIME results for **public** insurance are consistent with past research
 - For both **public and private** insurance:
 - characteristics of accurate reporting match likely enrollees
 - lends confidence in editing/imputation routines and use of survey data for policy simulations
 - Correlates of **private** reporting accuracy vary by survey:
 - For **ACS**, respondent-level characteristics matter, more significant correlates
 - For **CPS**, fewer significant correlates
- Next steps: Refine regression models; look at other accuracy metrics beyond undercount

I welcome suggestions
Thank you!

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