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State Health Access Data Assistance Center
Bridging the gap between research and policy

University of Minnesota
School of Public Health

Use of Federal Surveys for State Policy Analysis

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Overview of presentation

- Making the case: Need for state-level estimates
- Data requirements for state estimates
- ACS vs. CPS vs. IHIS for insurance coverage
- Comments on today's presentations
- Conclusion

MAKING THE CARE: STATE DATA NEED

State need for data (1)

- Implementation of access provisions in health reform
  - Medicaid expansion
  - State insurance exchange and regulation
  - Possible public plan implementation at the state level
  - Implementation of insurance regulations including young adult dependent coverage
- CHIP reporting requirements
  - Annual state reports to CMS on progress in reducing number of uninsured children

State need for data (2)

- Effectively target outreach,enrollment,and safety net strategies
  - Insurance status, age, location, income, race/ethnicity
- Budget and forecasting activities
  - Inputs to forecasting models based on expansion or contraction activities
  - Distribution formulas for state funds to localities
- Evaluation/Monitoring of Affordable Care Act

State data requirements

(1) ***State representative*** sample;

(2) ***Large enough sample*** and sample coverage that provides for reliable estimates for subpopulations including; low-income children, race/ethnic groups and geographic areas such as county or local region;

(3) ***Timely release of data*** including tabulated estimates of released within one year of data collection; and

(4) ***Access to micro-data*** through readily available public-use files with state identifiers to allow states do conduct their own analysis and policy simulations.

- *Source: (Blewett et al, JHPPL 2004)*

State Health Insurance Survey Activity 2001-Present

*Alabama, *'03*
Alaska, *'04, '05, '06-'07, '08*
Arkansas *'01, '04*
California *'01, '03, '05, '07, '09*
*Colorado *'01, '08-'09*
*Connecticut *'01, '04, '05, '06*
Florida *'03, '04*
*Georgia *'02*
Hawaii *'03*
Idaho *'05*
Illinois *'01*
*Indiana *'03*
Iowa *'01, '05, '07*
Kansas *'01, '06*
Kentucky *'05*
Louisiana *'03, '05, '07, '09*
*Maine *'01, '02, '05, '06*
Maryland *'01, '04*
*Massachusetts *'02, '04, '06-07, '07, '08*
Michigan *'05*
*Minnesota *'01, '04, '07, '09*
*Missouri *'04, '07*
Mississippi *'03-'04*
*Montana *'03, '07*
*Nebraska *'04, '07*
New Hampshire, *'01*
New Jersey *'01, '02, '03, '04-'09*
New Mexico *'02, '04*
*North Dakota *'04, '07*
Ohio *'03-'04, '08*
*Oklahoma *'03, '04, '08*
Oregon *'01, '02, '04, '06*
*Pennsylvania *'04, '08, HMPC ('00-'08)*
Rhode Island *'01, '04*
*South Carolina *'03*
South Dakota, *'01, '04, '07*
*Tennessee *'05*
Texas *'01, '02*
Utah *'01, '03, '04, '05, '07, '08*
Vermont *'05, '08*
*Virginia *'01, '04*
Washington *'00, '02, '04, '06, '08*
*West Virginia *'01, '03, '07*
Wisconsin *'01, 02, '03, '04, '05, '06, '07, '08, '09*
*Wyoming *'02*

NONE:
Arizona
Delaware
Nevada
New York (enrollment surveys)
North Carolina

17 states with ongoing surveys
*** 19 states used the CSCS**

Source: http://www.shadac.org/content/state-survey-research-activity

A few points on state surveys

- Most are RDD telephone surveys but lead states are moving to Dual Frame with cell-phone samples
  - *24.5% of HH were cell-phone only ('09)*
  - *Cell phone-only households are significantly more likely to lack health insurance compared to HH with landline telephone service*
- Most states account for coverage error due for HH without phone service through a weighting adjustment
  - *Similar adjustments for cell-phone HH have yielded mixed results*
- Concern about declining response rates on RDD surveys
- State surveys have 24% fewer uninsured than CPS

Source: Call et al, ***Health Affairs****, 2007*

COMPARISONS OF KEY FEDERAL SURVEYS AND STATE SURVEYS

Methods – federal survey comparisons

- 2008 ACS and 2009 CPS data come from publically available micro-data files provided by the Census Bureau
- 2008 NHIS data come from published tabular data
- Uninsurance is defined in all surveys as lacking any public or private coverage in CY 2008
- The ACS and NHIS use a point-in-time measure and the CPS uses an all-year measure
- Standard errors in ACS and CPS were created using the replicate weight methodology suggested by Census.

Sample size comparisons

	All Ages		
State (Survey Year)	ACS	CPS	State Survey
CA (07)†	339,381	19,836	64,599
CO (08-09)†	47,803	4,402	10,090
NJ	85,393	4,629	7,336
MA (08)†	63,688	3,173	12,235
MN (09)†	52,144	4,666	12,031
OH‡	114,426	5,417	50,944
OK (08)	36,704	2,974	5,729
PA (08)	122,337	6,151	49,345
VT	5,924	2,717	9,237
WI (07)	57,157	3,913	6,857

ACS vs CPS state perspective

Positive:

-Large sample size, geographic coverage, annual estimates, public-use files

-Imputation done in each state independently

-Point-in-time coverage questions

-Ask coverage about each person in HH

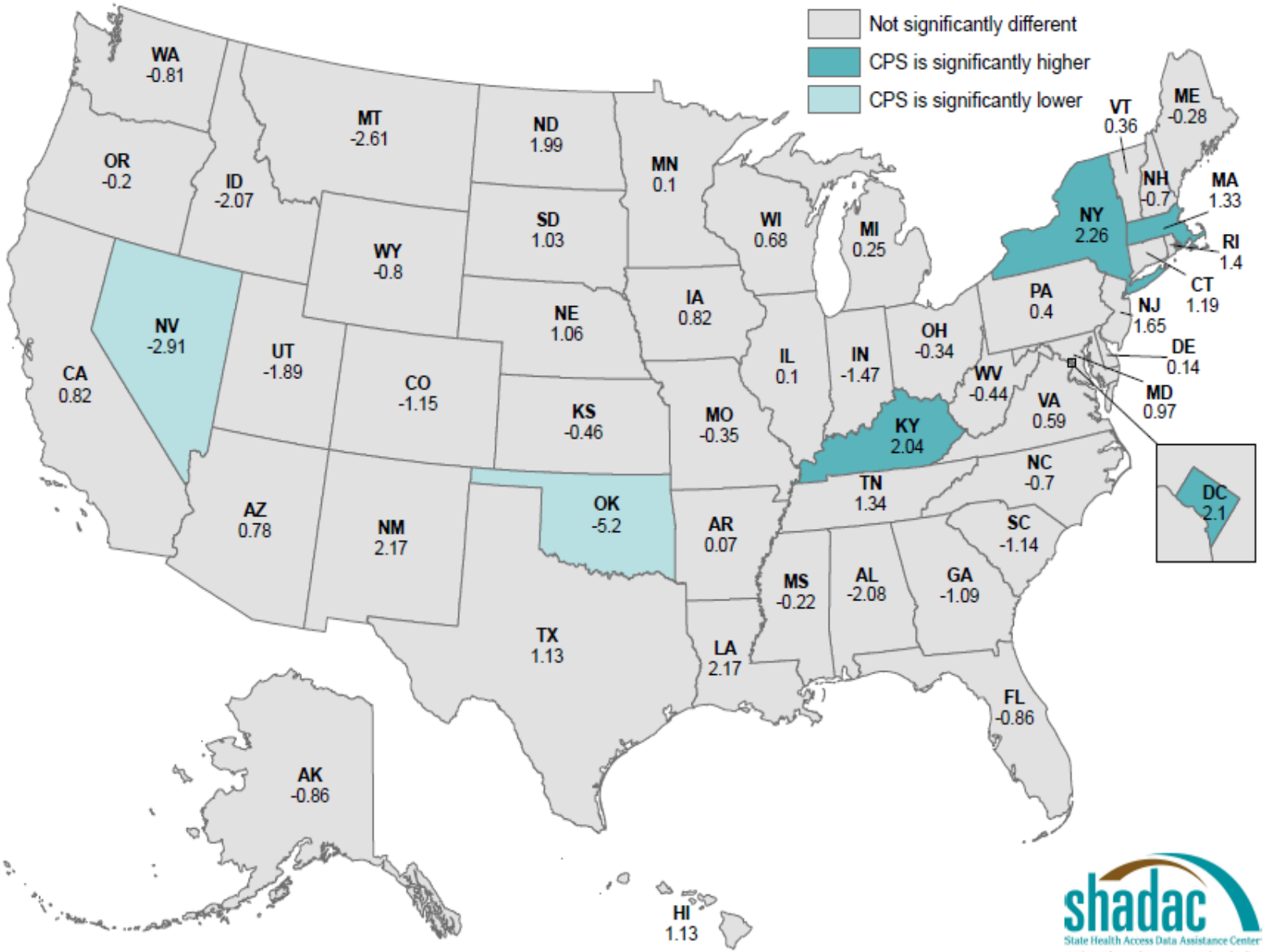
Negative:

-Lack of state add-in names

-Different estimates and unfamiliar from the CPS and state surveys

-No additional health status or access questions

Percentage Point Difference Between CPS and ACS Unisurance Rate: All ages



Source: 2009 Current Population Survey; 2008 American Community Survey.

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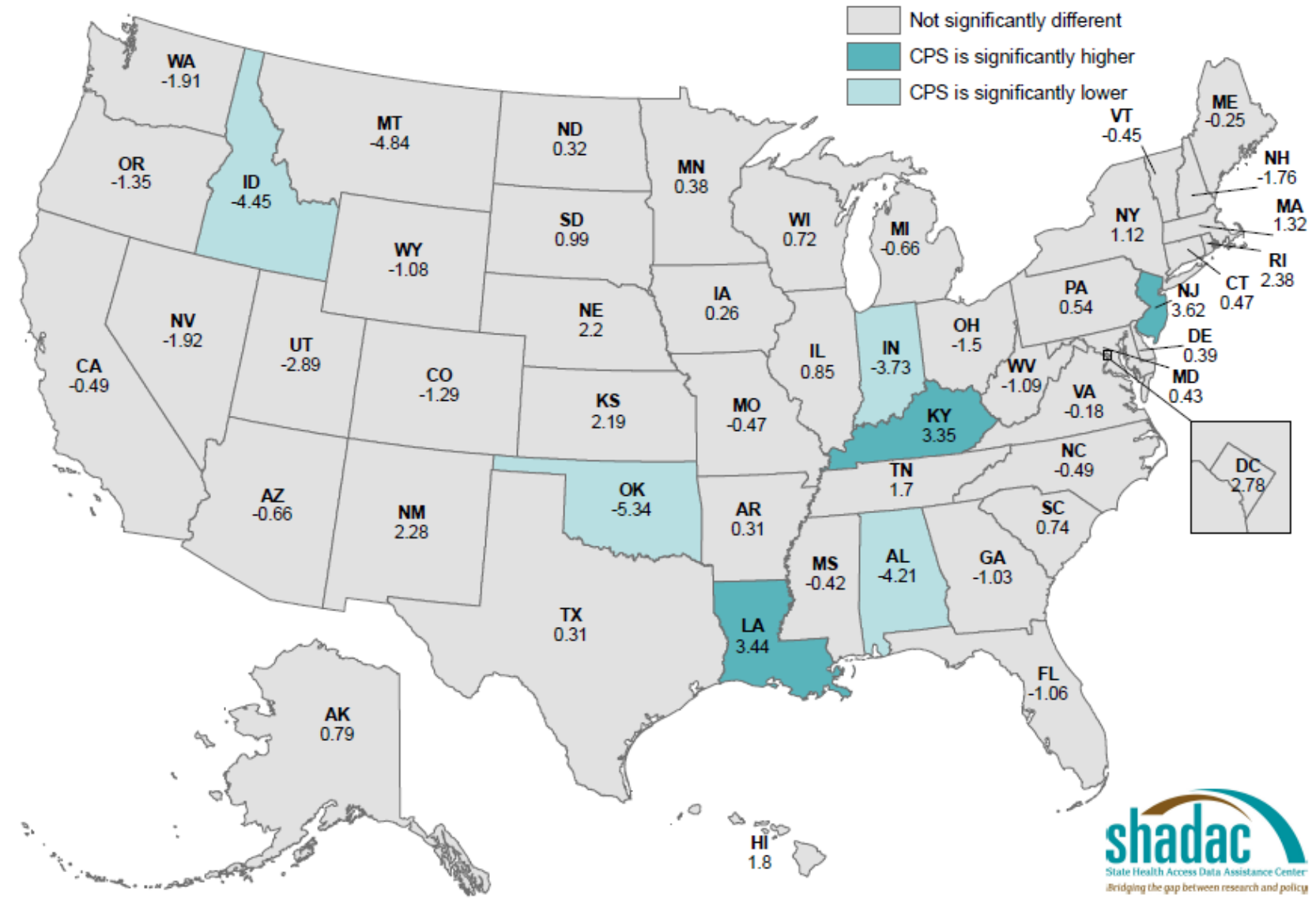
Percentage Point Difference Between CPS and ACS Unisurance Rate: Children (0-18)



Source: 2009 Current Population Survey; 2008 American Community Survey.

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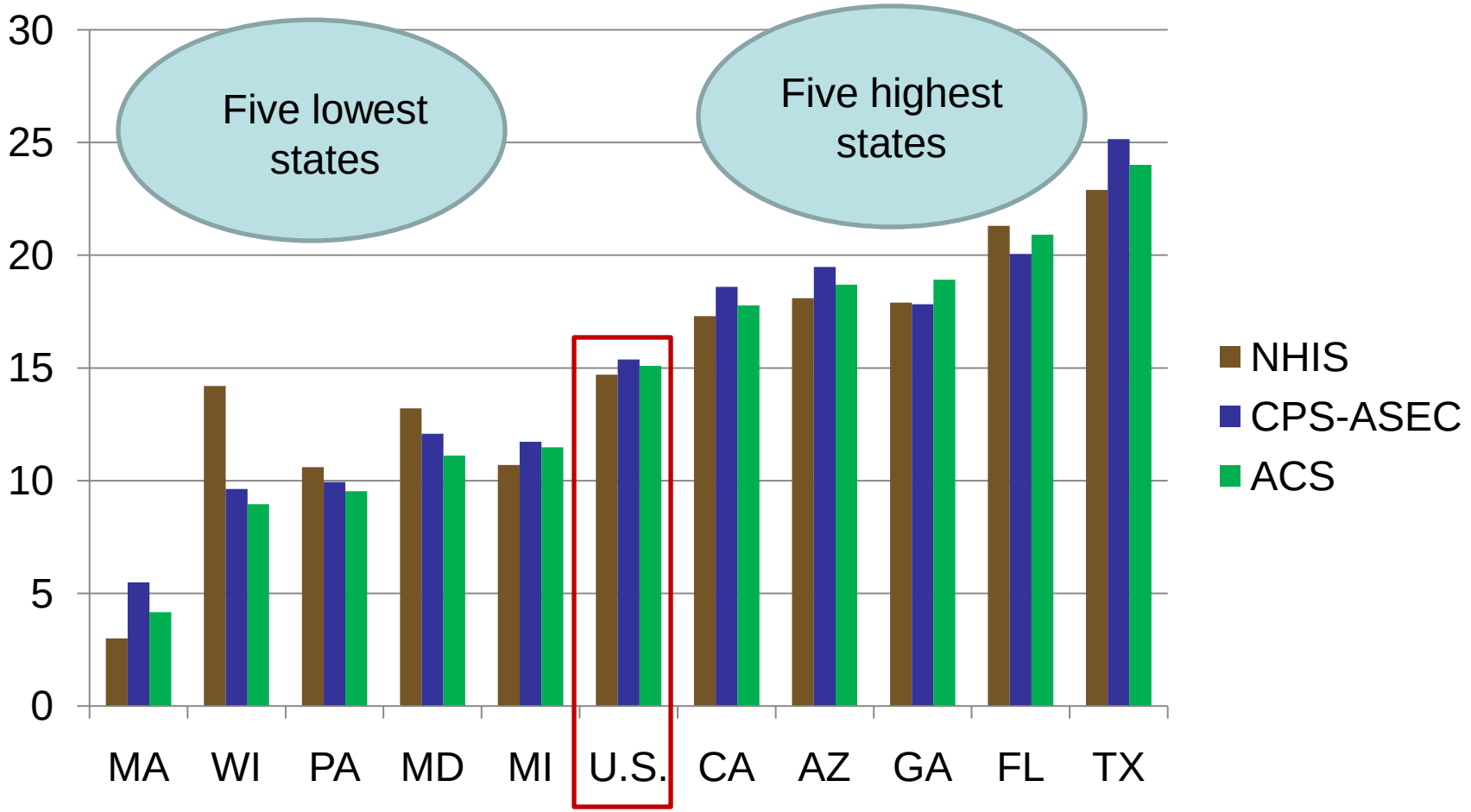
National Health Interview Survey

- The NHIS publishes health insurance coverage estimates for 20 selected states each year
  - *AZ, CA, FL, GA, IL, IN, MD, MA, MI, MO, NJ, NY, NC, OH, PA, TN, TX, VA, WA, WI.*
- Smallest geographic identifier available on public-use micro-data is the census region
  - Limits state-level or subpopulation analysis
- Data users wanting state-level analysis must obtain access to state identifiers in NCHS RDCs
  - *Only those with enough sample and sample coverage as determined by NCHS*
- Rich health-related data source, good point-in-time health insurance question,

Integrated Health Interview Survey (IHIS)

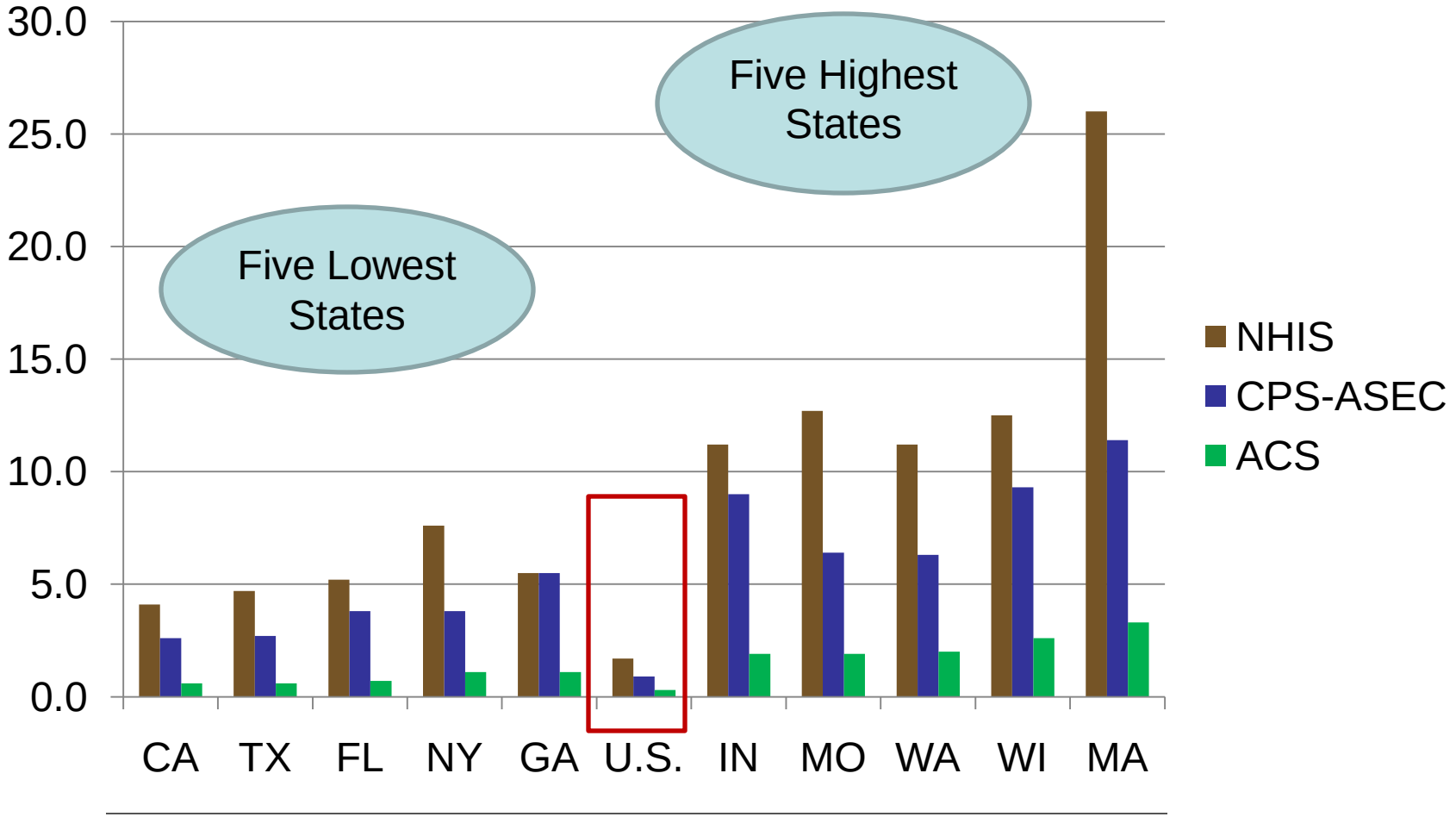
- NICHD-funded project to harmonize 30 years of the NHIS
- 13,000 harmonized variables, recent August 2010 release of 5,000 integrated and documented variables; 7,000 in November
- Ability to link IHIS to state identifiers in NCHS RDCs…SHADAC developing data resource for states
- http://www.ihis.us/ihis/

Comparison of Estimates of Uninsurance by Federal Survey Source, All Ages *(sorted by ACS)*



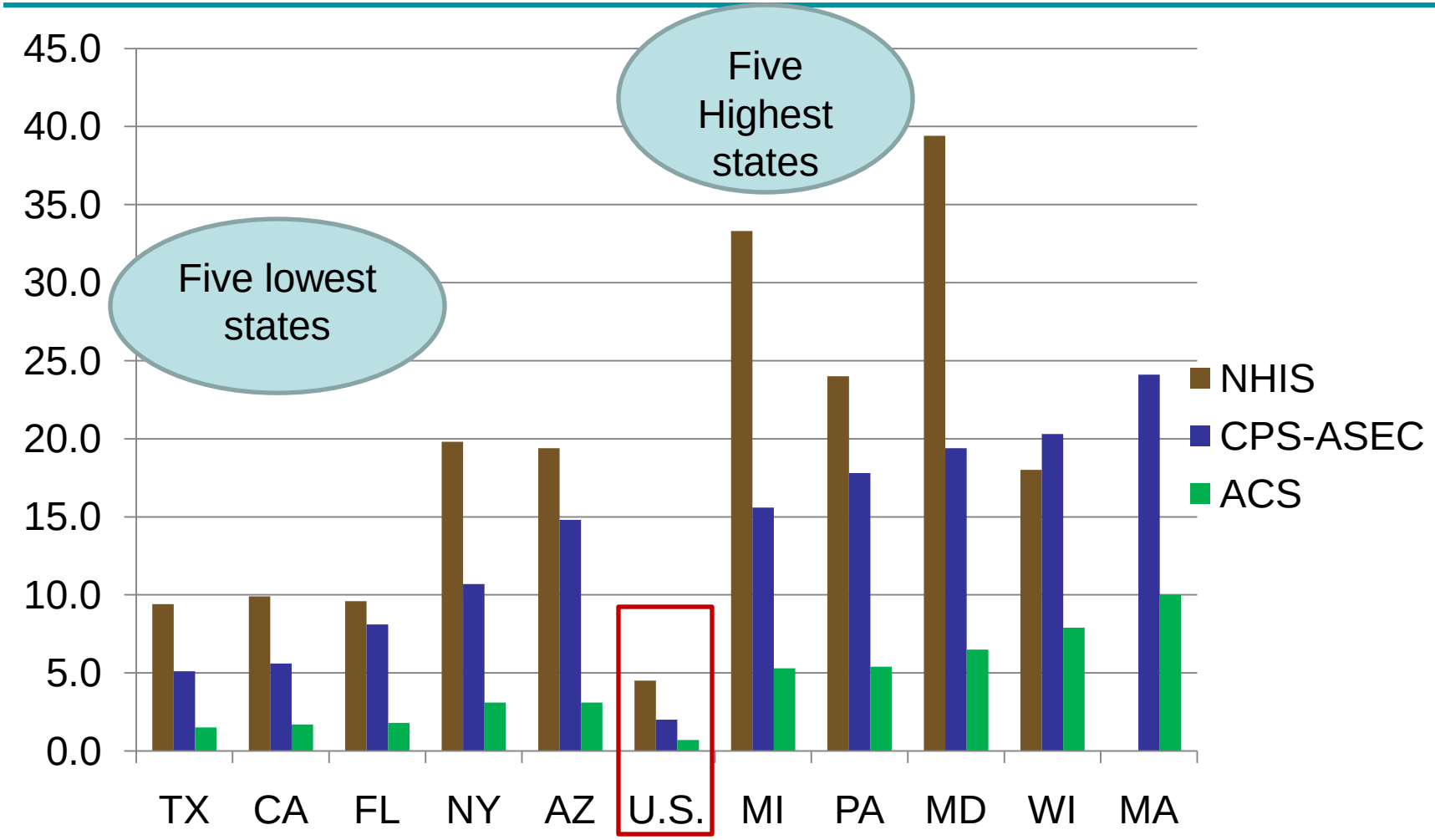
Source: 2009 CPS-ASEC and 2008 ACS data are from public use data. NHIS data collected from published reports.

Comparison of Relative Standard Errors for Estimates of Uninsurance by Federal Survey Source, All Ages



Source: 2009 CPS-ASEC and 2008 ACS data are from public use data. NHIS data collected from published reports. Relative standard errors defined as the standard error divided by its mean.

Comparison of Relative Standard Errors for Estimates of Uninsurance by Federal Survey Source, Children (0-17)



Source: 2009 CPS-ASEC and 2008 ACS data are from public use data. NHIS data collected from published reports.
Data is missing in MA for NHIS due to small sample sizes.
Relative standard errors defined as the standard error divided by its mean.

COMMENTS ON PRESENTATIONS

Creative use of federal survey data (1)

- MEPS pooled state sample in the RDC *(Cunningham) – OOP Costs*
  - Potential use of pooled data files or pooled estimates created annually on key variables
  - Difficult for state analysts to do on their own
  - Difficult to detect significant change over time
- Two-stage estimation *(Graven) – Chronic Conditions*
  - Relative comparisons across states interesting
  - Difficult to track trends over time
  - Methodologically cumbersome

Creative use of federal survey data (2)

- NHIS: Analysis of larger states with enough sample size and sample coverage *(Long) health insurance coverage*
  - Important comparative analysis of different policy strategies
  - Only applicable for larger states with enough sample
  - Limited understanding of trends in large states with small populations

CONCLUSION

Federal survey capacity

- Each federal survey has unique purpose and provides important national estimates of key policy variables
- States cannot afford the ability to field multiple surveys to meet all of their needs
- Researchers demonstrated creative methods to develop and compare state estimates of key policy variables
  - *Not done routinely nor consistently*
- Still difficult to know what is working and where

Two potential options…….

1. Expand sample size and sample coverage for key federal surveys to produce reliable state-estimates of policy variables of interest
   - *NHIS for coverage, health status, health conditions, MEPS for cost and utilization*
2. Build a state-level data collection infrastructure to inform national monitoring of the affordable care act
   - *Could be a sub-group of states building off existing state surveys*
   - *Early indicators of reform success and challenges*

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