

Using the ACS to Calculate National and State-Level Federal Program Participation Ratios for Working-Age People with Disabilities

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- The contents of this presentation do not necessarily represent the policies of the U.S. Department of Education or any other federal agency (Edgar, 75.620 [b])

Motivation for the Study

- Recent studies have focused on the participation of working-age people with disabilities (PWD) in safety-net programs at the national level
- Less is known about state-level variation in program participation among PWD
- State-level statistics can help us assess:
 - How well each state is meeting the needs of working-age PWD
 - How changes in states' policies and economic conditions affect participants and expenditures
- State-level statistics cited by the media do not account for variation in disability prevalence or sampling error

Objectives

- **Produce state-level information on disability program participation**
 - **Use a statistic that is consistent across states**
- **Address the following challenges:**
 - **Underestimation of program participation in survey data**
 - Meyer et al. (2009)
 - Wheaton (2008)
 - Stapleton et al. (2012)
 - **Previous estimates based on relatively small sample sizes, resulting in large sampling variance**
 - **Most surveys exclude those living in group quarters, including many PWD**

Data

- **State-level information from published administrative reports**
 - **Social Security Administration (SSA)**
 - Annual Statistical Report on Social Security Disability Insurance (SSDI) (December 2009)
 - Supplemental Security Income (SSI) Annual Statistical Report (December 2009)
 - **Centers for Medicare & Medicaid Services (CMS)**
 - Medicare Enrollment Reports (July 2010)
 - Medicaid Statistical Information System State Summary Datamart (MSIS SSD) (December 2009)
 - **Rehabilitation Services Administration**
 - Annual Review Report (fiscal year 2010)
 - **Department of Veterans Affairs**
 - Annual Benefits Report (fiscal year 2010)
 - Veteran population tables (September 2010)
- **State-level estimates of the number of PWD from the ACS**
 - 2008–2010 3-year estimates and margins of error (MOEs) from American FactFinder tool
 - Include institutionalized PWD when possible

Method and Limitations

- **Participation ratio:**

$$\frac{\hat{X}}{\hat{Y}} = \frac{\text{number of participants according to administrative reports}}{\text{estimated number of PWD according to ACS disability sequence}}$$

- **Standard errors (Census Bureau 2010):**

- $SE(\hat{X}) = 0$
- $SE(\hat{Y}) = MOE(\hat{Y})/1.645$

$$SE\left(\frac{\hat{X}}{\hat{Y}}\right) = \frac{1}{\hat{Y}} \sqrt{[SE(\hat{X})]^2 + \frac{\hat{X}^2}{\hat{Y}^2} [SE(\hat{Y})]^2}$$

- **The denominator (and therefore the ratios) can be biased upward or downward compared with participation *rates***

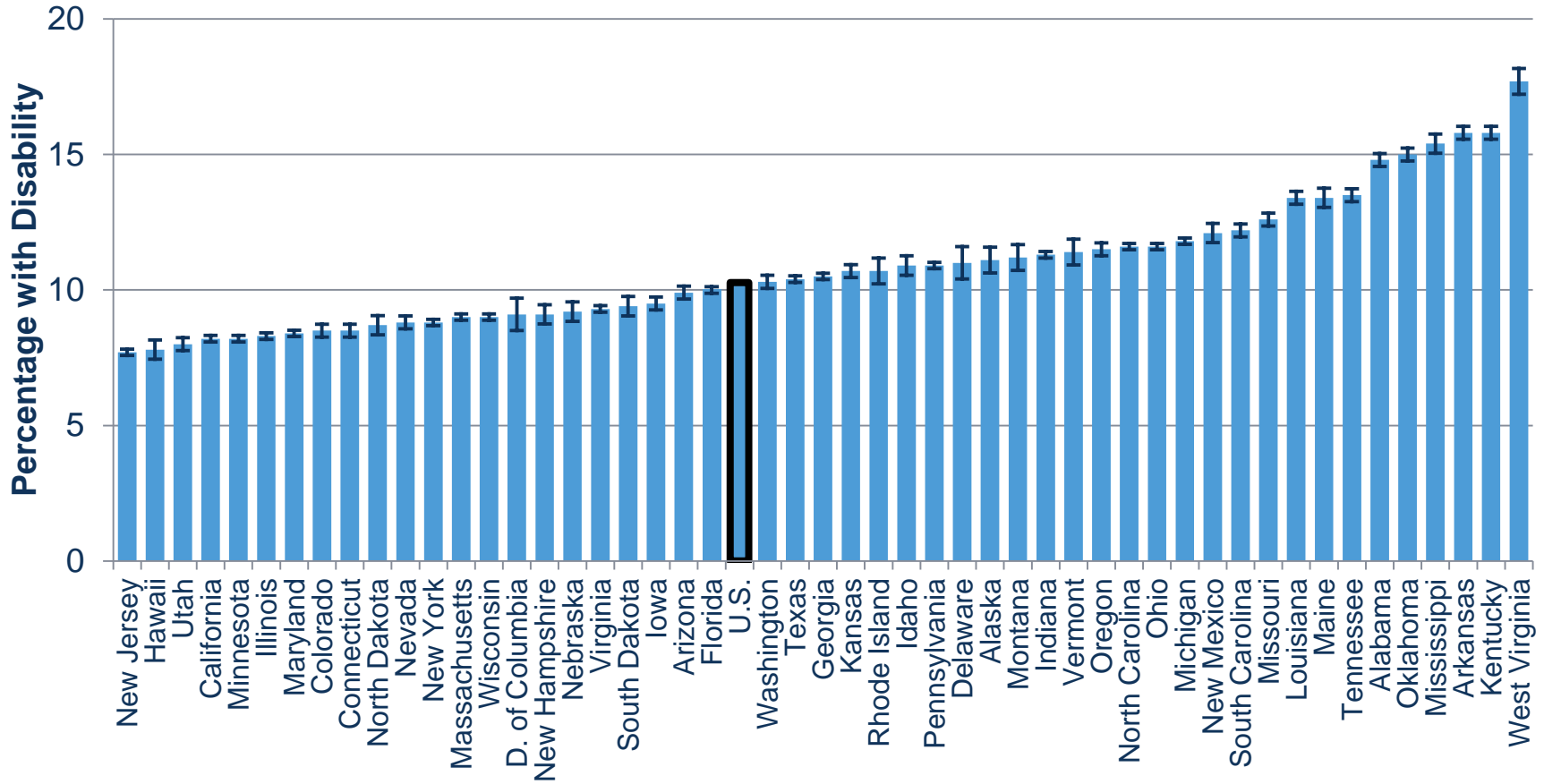
- **Includes many not eligible for program participation**

- Impairment not sufficiently severe
- Insufficient work history
- Undocumented immigrants

- **Omits many who participate or are eligible**

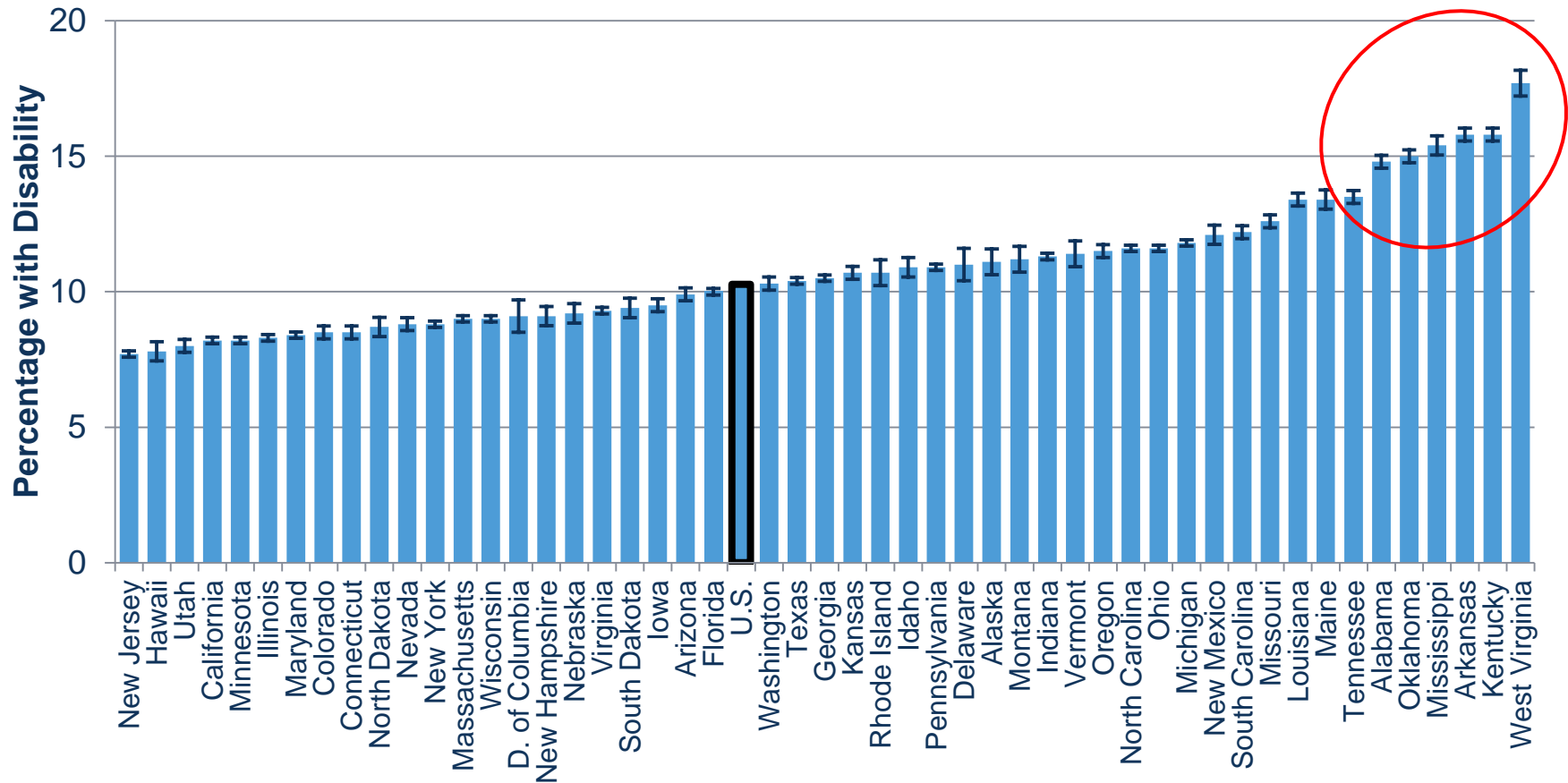
- ACS six-question disability sequence captures 66 percent of those receiving SSDI and/or SSI benefits (Burkhauser et al. 2014)

State Variation in the Percentage of PWD (1)



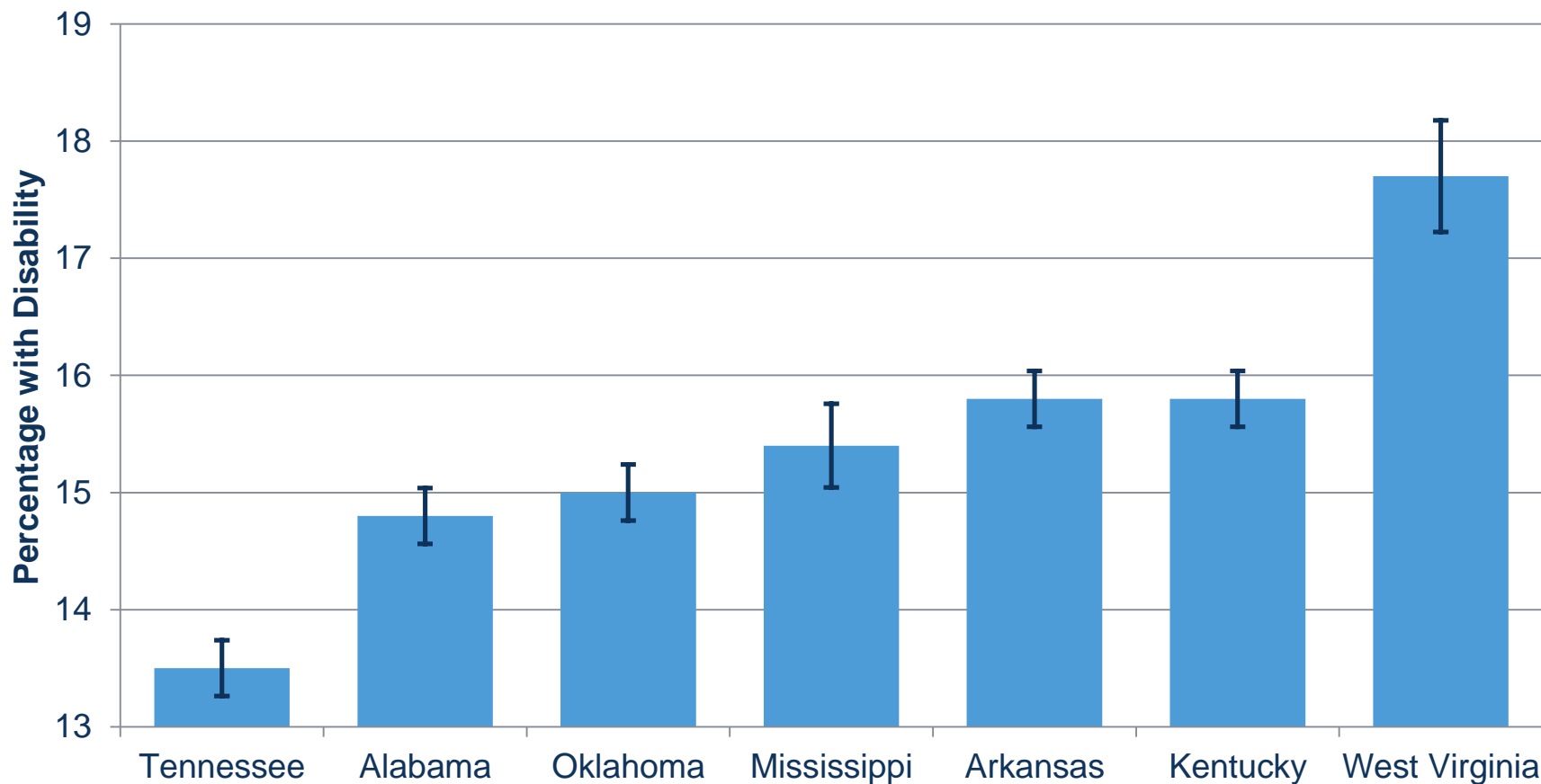
Note: The error bars represent 95 percent confidence intervals.

State Variation in the Percentage of PWD (1)



Note: The error bars represent 95 percent confidence intervals.

State Variation in the Percentage of PWD (2)

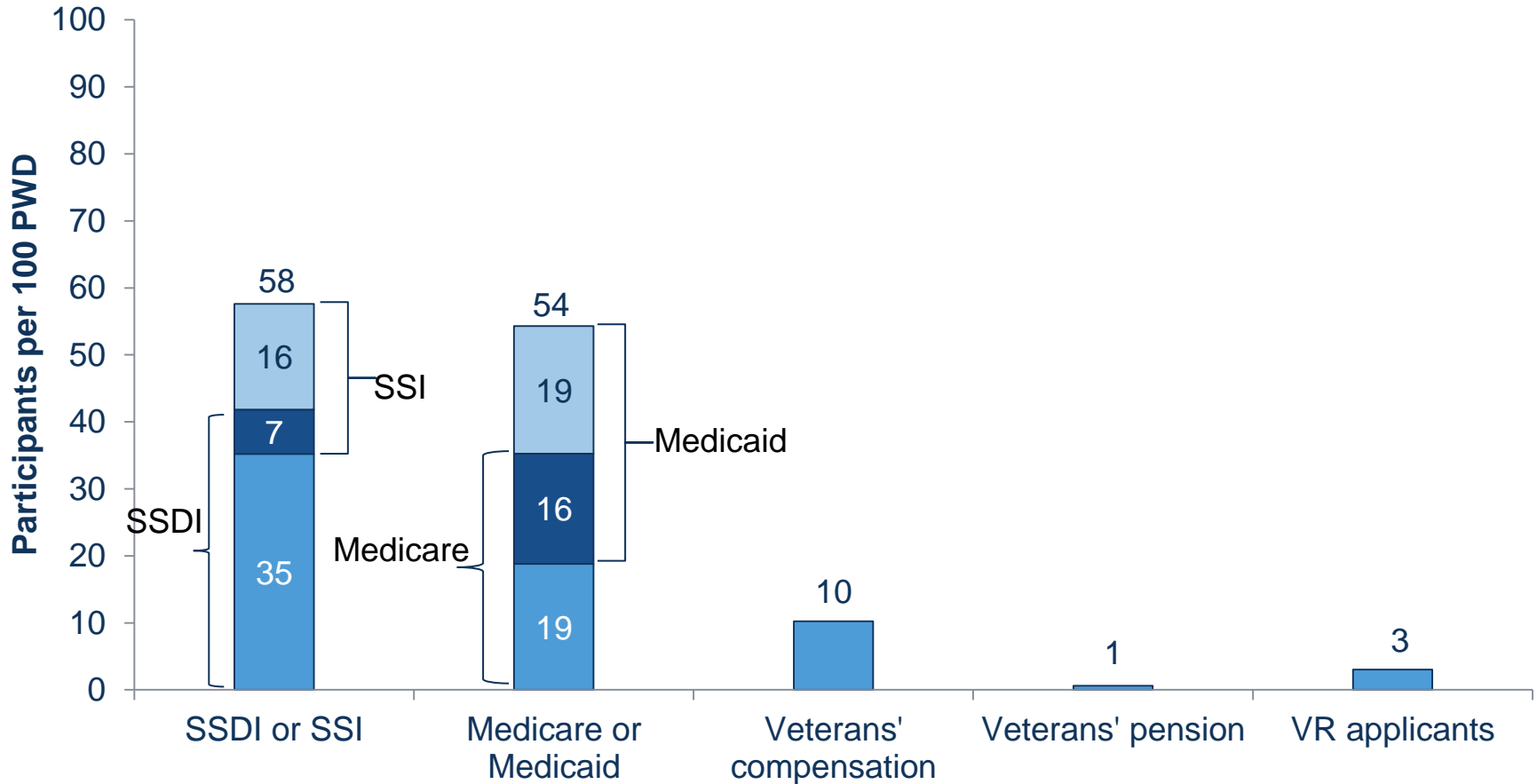


Note: The error bars represent 95 percent confidence intervals.

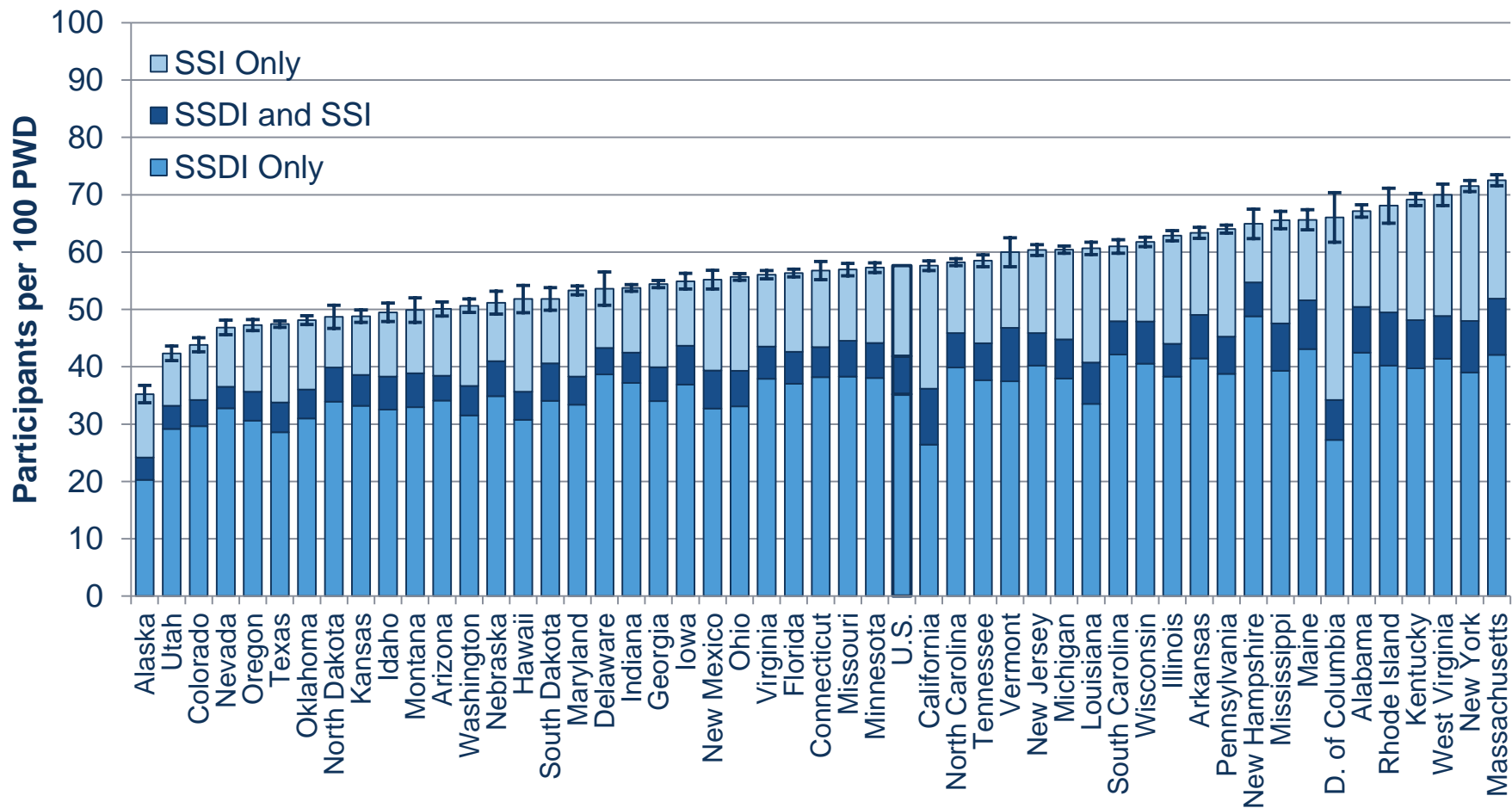
Published Program Statistics

Program	Number of Working-Age (18–64) Participants	Date
Published Program Reports		
SSDI	8,317,351	December 2009
SSI	4,450,840	December 2009
SSDI or SSI	11,455,339	December 2009
Medicare	7,007,981	July 2010
Vocational rehab (VR) applicants	604,095	FY 2010
Veterans' compensation	2,033,435	FY 2010
Veterans' pension	121,100	FY 2010
MSIS Datamart		
Medicaid	7,050,416	December 2009
Medicaid and Medicare	3,267,968	December 2009

National Program Participation Ratios

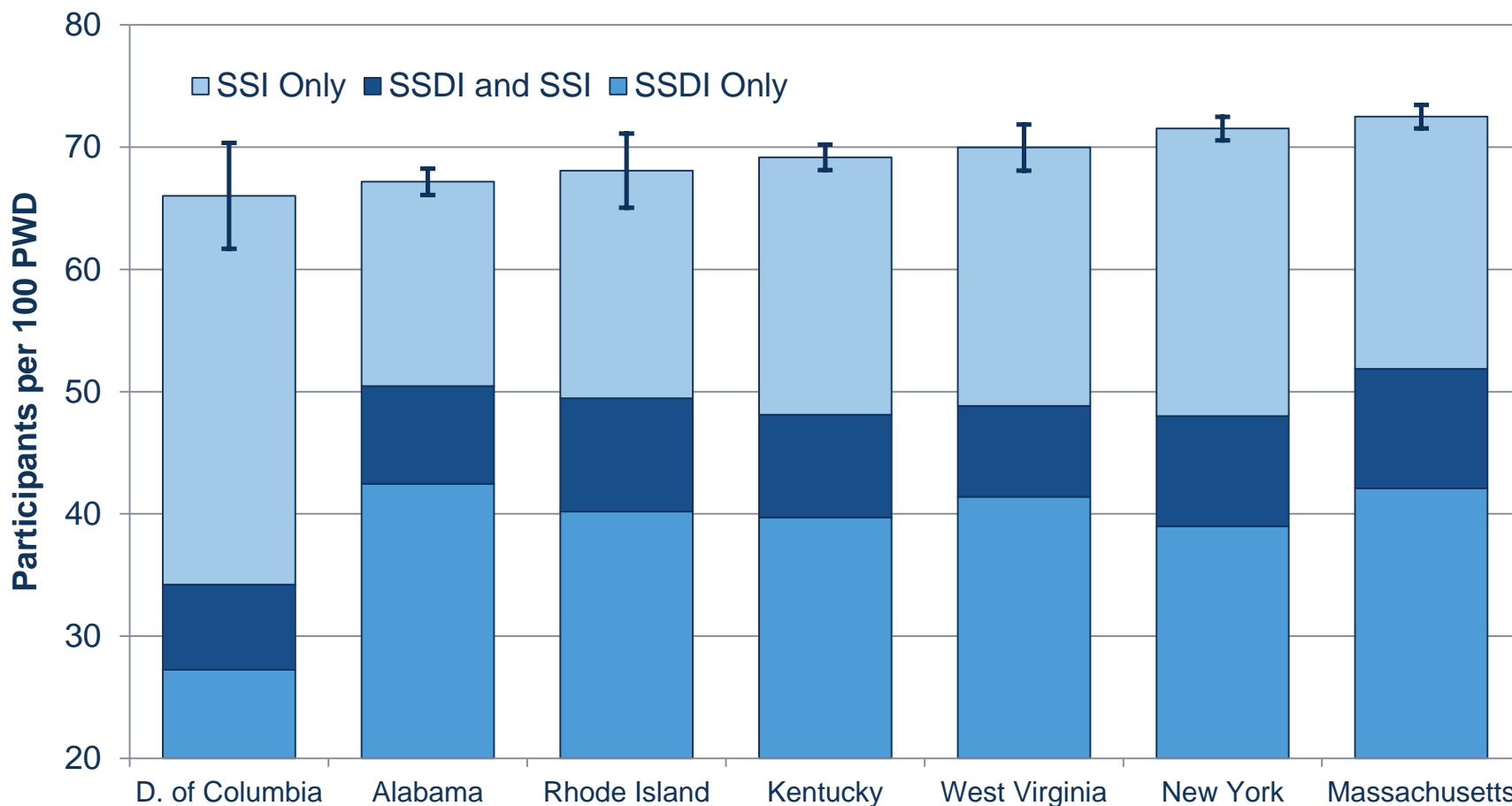


State Program Participation Ratios: SSA (1)



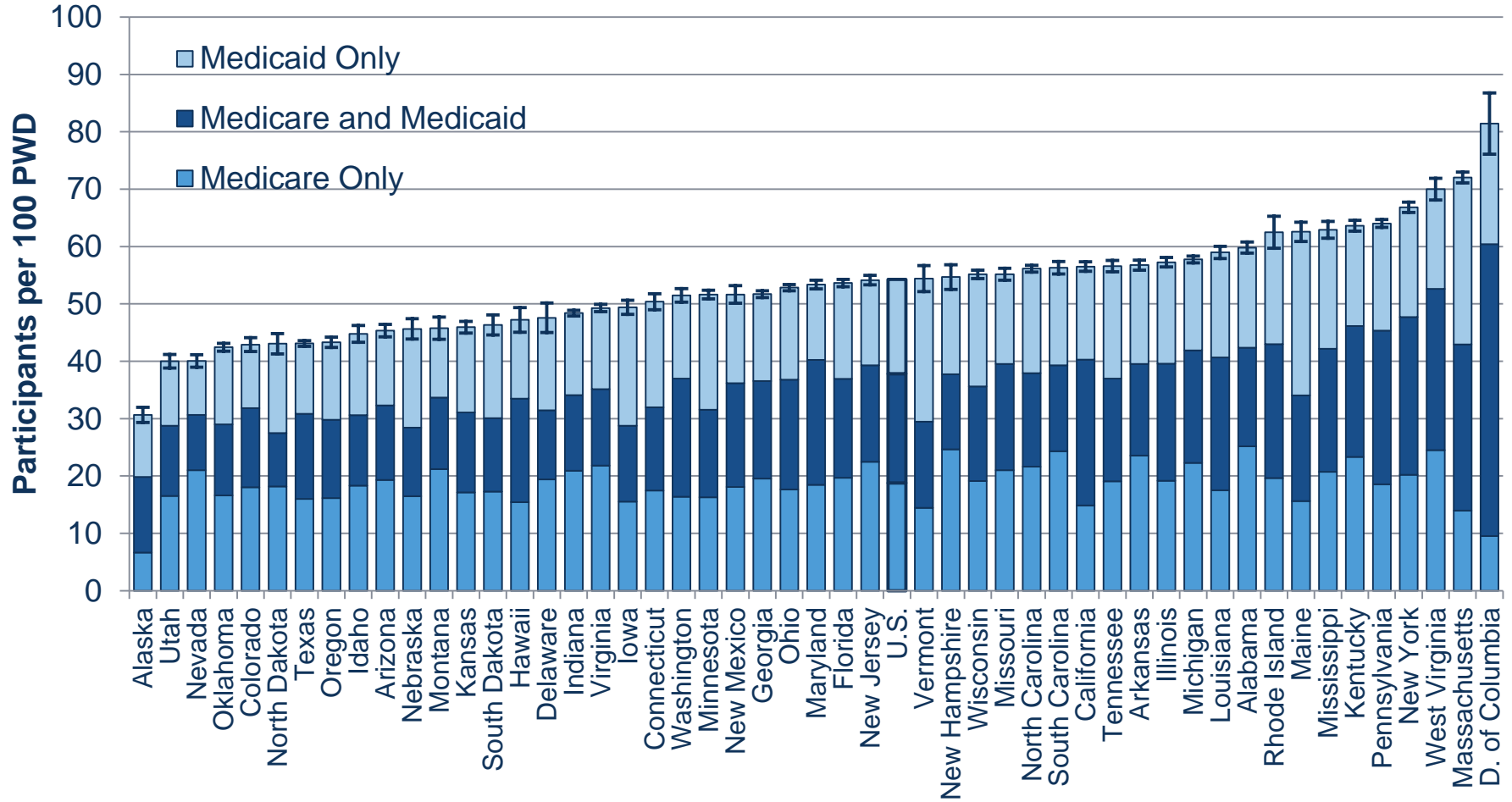
Note: The error bars represent 95 percent confidence intervals.

State Program Participation Ratios: SSA (2)



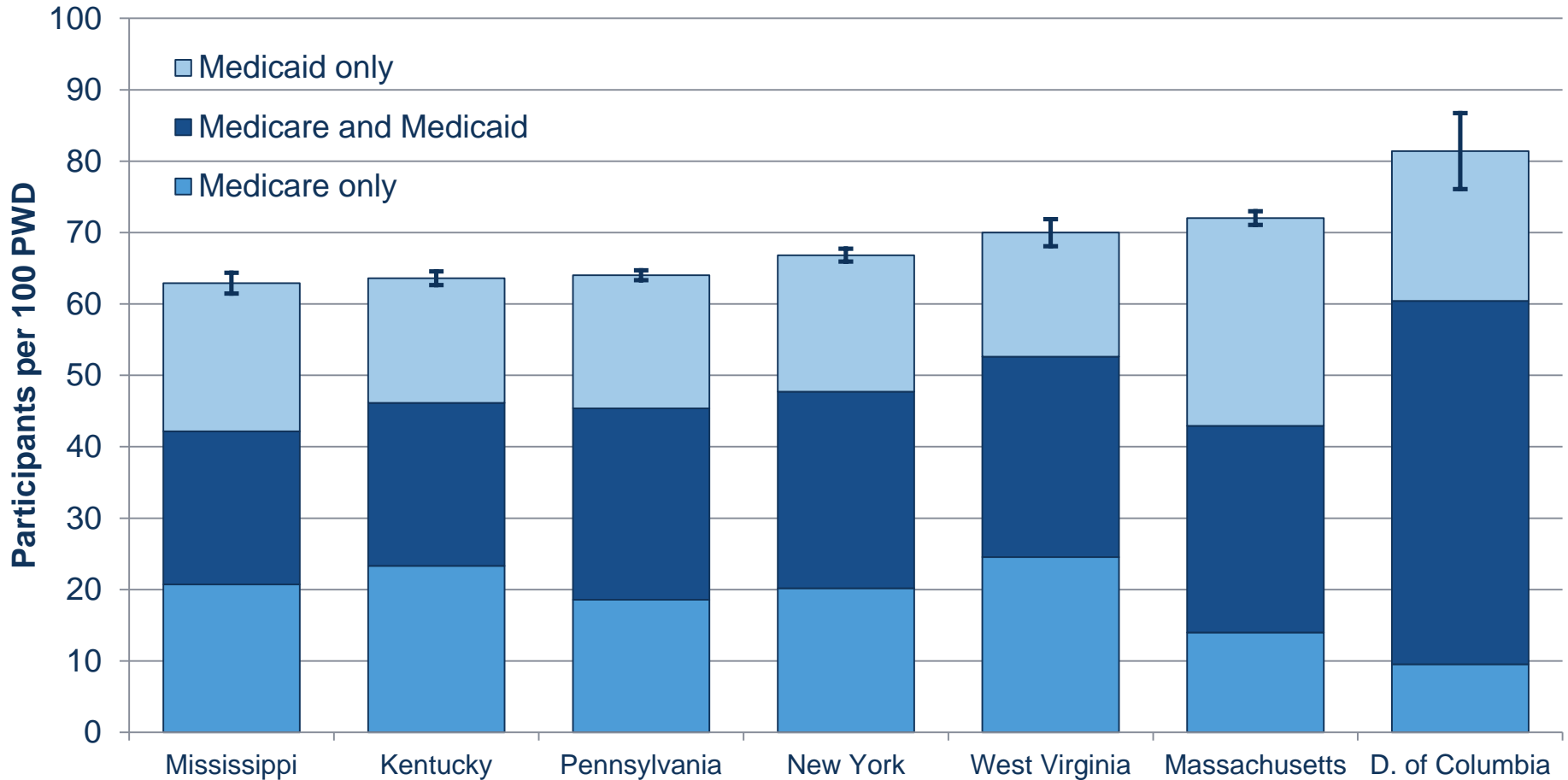
Note: The error bars represent 95 percent confidence intervals.

State Program Participation Ratios: CMS (1)



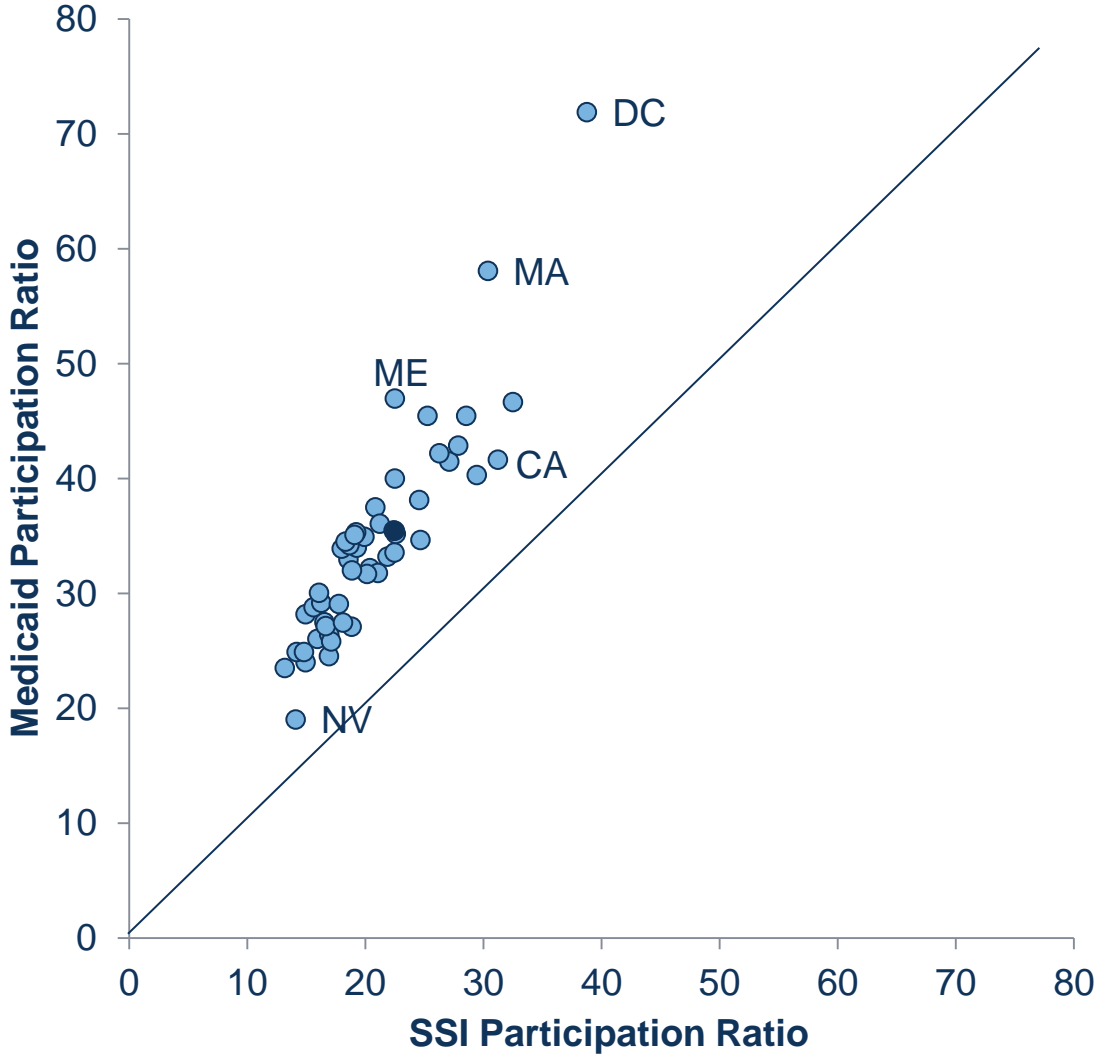
Note: The error bars represent 95 percent confidence intervals.

State Program Participation Ratios: CMS (2)

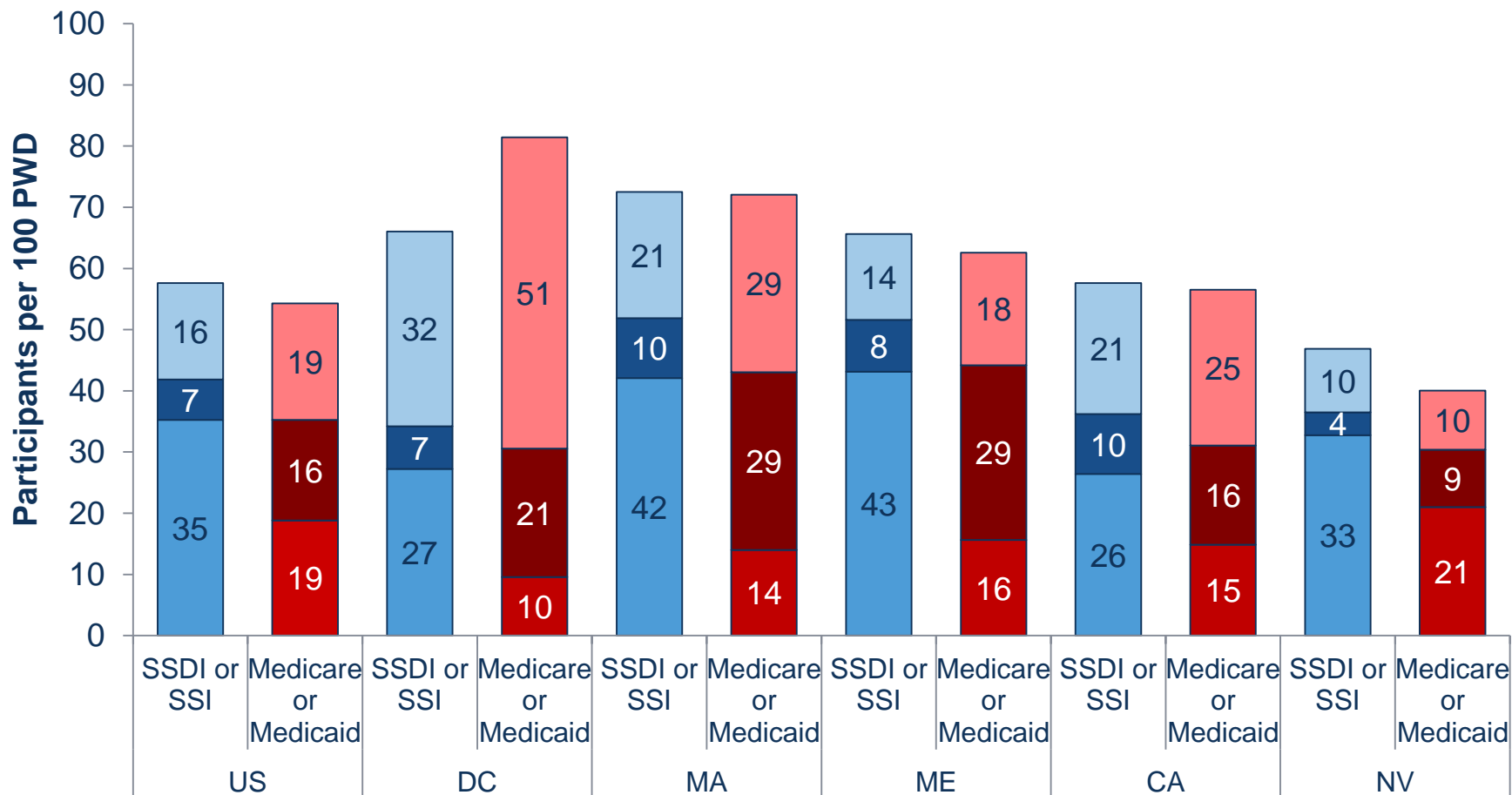


Note: The error bars represent 95 percent confidence intervals.

Cross-State Relationship: SSI and Medicaid



SSDI/SSI Versus Medicare/Medicaid



Summary

- **Combining administrative information and ACS data provides useful state-level statistics on program participation**
- **Cross-state variation in SSDI/SSI participation ratios for working-age PWD is remarkably large**
 - **The two highest estimates (Massachusetts and New York) are more than twice as large as the lowest estimate (Alaska)**
 - **There is considerable variation across states in the distribution of participants between SSDI and/or SSI**
- **Cross-state variation in participation ratios is greater for Medicare/Medicaid than for SSDI/SSI**
 - **Reflects the extent to which Medicaid covers PWD who are neither SSI nor SSDI participants**
 - **Particularly in DC, MA, and ME, many SSDI-only beneficiaries are eligible for both Medicare and Medicaid services**
- **Estimated participation ratios may be biased downward or upward compared with actual participation *rates***
 - **This is not necessarily a problem for cross-state analysis**

Policy Questions

- **Are participation ratios low in certain states because many people are not receiving benefits for which they are medically and financially eligible?**
 - **Or are many of those who are medically eligible not financially eligible:**
 - Because they work and their earnings are too high?
 - Because they have not worked enough in the past to qualify for SSDI and have other income/assets that make them ineligible for SSI?
 - **Is there a large pool of medically eligible nonparticipants who would likely participate if their financial circumstances deteriorate?**
- **Are there significant numbers of SSDI-only beneficiaries (1) living in states with relatively low Medicaid coverage for this group and (2) unable to obtain personal services not covered by Medicare?**
 - Are they experiencing significant hardship because of out-of-pocket expenditures?
 - To what extent does this variation reflect variation in the availability of Medicaid Buy-In for SSDI-only beneficiaries who work?

For More Information

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