

MEDICAID UNDER-REPORT IN RECENT ACS – AN APPROACH FOR PARTIAL CORRECTION

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Outline

- » Differences between ACS estimates and administrative counts of Washington state's Medicaid enrollment for 2010-15
- » The need to adjust the undercount of Washington's Medicaid enrollment in 2014 and 2015 ACS
- » The ad-hoc approach we adopted to partially correct the undercount in 2014 and 2015 ACS

Differences between ACS estimates and administrative counts of Washington state's Medicaid enrollment for 2010-15

Data sources

- ≻ACS 1-year PUMS: 2010-15
- CMS June estimates (including CHIP): 2010-15 (downloaded from KFF website)
- ➤Washington State Medicaid administrative (WA Admin) estimates (including CHIP) for June: 2010-15
 - ➤WA Admin estimates exclude short-term and partial-benefit program enrollees

Estimates of Washington State's Medicaid Population, 2010-15: ACS, CMS and WA Admin



Differences in Estimates (%) of Medicaid Population, 2010-15: ACS vs. CMS and ACS vs. WA Admin (June)



The need to adjust the undercount of Washington's Medicaid enrollment in 2014 and 2015 ACS

The policy communication dilemma presented by the large discrepancy in the Medicaid counts between ACS and WA Admin

- ➤ACS data for Washington show that Medicaid is largely responsible for the state's unprecedented reduction in total uninsured since 2014 from its 2013 level.
- ➤At the same time, ACS has an undercount of the Medicaid population by about 20 percent in 2014 and 2015.

Coverage Source Distribution (%) in ACS, Washington, 2013-15

■2013 ■2014 ■2015



Washington's Coverage Changes in ACS from 2013 to 2014 and from 2013 to 2015



Change from 2013 to 2014 Change from 2013 to 15



The incremental coverage change from 2014 to 2015 in the ACS appears to be just between Medicaid (increase) and the uninsured (decrease).

And yet, ACS 2015 still has an undercount of Medicaid by about 20 percent when compared with WA Admin (June).

If the Medicaid undercount is not adjusted, it would be difficult to communicate about the impact of the ACA on coverage.

-10.0

Other

The ad-hoc approach we adopted to partially correct Washington's Medicaid undercount in 2014 and 2015 ACS

The Process

Adjust Medicaid weights in ACS 1year PUMS

Compensate the Medicaid adjustment in the weights of other coverage sources

Rake modified weights on selected dimensions with preadjustment distributions from ACS

Adjust Medicaid weights

≻In ACS 1-year PUMS:

- PUMAs with exclusive county designation are grouped into their respective counties; other PUMAs are lumped into one group
- > 11 groups with 10 identifiable counties
- Create summary counts of Medicaid in 3 age categories (0-17, 18-64, 65+) for each of the 11 geography groups
- ≻In WA Admin
 - Create summary counts of Medicaid in 3 age categories (0-17, 18-64, 65+) for each of the 11 geography groups
 - Reduce the summary counts of Medicaid enrollment by about 5 percent to mimic the "normal" undercount of the state's Medicaid population in ACS prior to 2014
- Calculate adjustment factors by comparing the summary counts of Medicaid between ACS and WA Admin for the geography-by-age groups
- Apply the adjustment factors to weights of ACS records with Medicaid coverage for the geography-by-age groups

Compensate the adjusted amount of Medicaid in other coverage sources

- The net change (increase) in the adjusted weight for Medicaid population in ACS is treated as Medicaid "growth".
- > Determine the contributing sources of Medicaid "growth":
 - The RAND's national panel survey results on coverage shifts from 2013 to 2014 were used to determine the sources and proportions of Medicaid "growth"
 - Changes in Health Insurance Enrollment Since 2013: Evidence from the Rand Health Reform Opinion Study" by Katherine Grace Carman and Christine Eibner
 - Sources of new Medicaid enrollees: 40% from uninsured, 10% from ESI, 50% from others
- ≻At the PUMA level:
 - Calculate the difference in Medicaid weight sums before and after the Medicaid weight adjustment
 - Distribute the difference using the proportions of the Medicaid "growth" by source from the RAND survey
 - > Use the distributions to reduce the weight in each of the 3 non-Medicaid sources

Rake modified weights on dimensions with pre-adjustment control totals

➤At the PUMA level, raking was conducted to align distributions of selected characteristics to original ACS distributions

≻Selected characteristics:

Age (3 groups)	Hispanic origin (2 groups)	Race (7 dichotomies)
FPL (7 groups)	Citizenship (5 groups)	Bi-variate combos

Control totals for these raking dimensions were created using original ACS weights

In addition, the adjusted Medicaid counts in the 3 age groups were used as raking dimensions to retain the adjusted values

Effect of the partial correction on uninsured rates

Sample uninsured rates (Washington) before and after the partial correction

	201	2014			
	Unadj.	Adjusted	Unadj.	Adjusted	
Total	9.2	8.2	6.6	5.8	
Age					
0-17	4.6	3.9	3.2	2.7	
18-64	13.0	11.5	9.4	8.3	
65+	0.9	1.0	0.6	0.6	
Sex					
Male	10.6	9.4	7.8	7.0	
Female	8.0	7.0	5.4	4.7	
Hispanic Origin					
Hispanic	21.0	19.2	18.2	16.7	
Non-Hispanic	7.7	6.7	5.0	4.3	
Race					
White (one race only)	8.4	7.3	5.8	5.0	
Black (one race only)	9.1	8.3	7.4	6.4	
AIAN (one race only)	20.7	18.0	17.2	14.9	
Asian (one race only)	8.5	7.7	5.1	4.6	
NHOPI (one race only)	15.8	15.6	9.7	9.4	
Other (one race only)	24.8	22.9	23.2	21.7	
Two or More Races	9.1	8.6	4.9	4.3	

Summary

- Starting in 2014 when Medicaid was expanded in Washington under the ACA, the ACS counts of Medicaid population broke the trend of prior years with a significantly greater undercount at about 20 percent.
- The greater undercount presented a dilemma in communication about the coverage changes – ACS data show that Medicaid played a key role in Washington's uninsured reduction under the ACA and yet 20 percent of the Medicaid population was not reflected in ACS.
- ➢Our methodological approach to adjust ACS for its undercount of Washington's Medicaid population, with its limitations, provides a partial solution to the dilemma by increasing Medicaid weights in ACS to the level comparable to administrative counts while maintaining, to extent possible, the ACS distributions of selected population characteristics.

> The partial correction resulted in lowered uninsured rates.

Limitations and future considerations

≻Limitations:

- Despite the raking on selected characteristics, the partial correction of ACS Medicaid undercount presented here may result in differences in some non-coverage estimates that are not controlled for in the raking. We recommend that the use of the modified weights be limited to analyses related to health coverage.
- The use of national estimates on non-elderly adult coverage shifts in compensating the Medicaid adjustment in other sources is not an ideal one: it is not state-specific and it is based on non-elderly adult population. Better data sources are needed.

➢Future considerations

We recommend the Census Bureau to consider incorporating Medicaid (and Medicare) enrollment counts in constructing the ACS weights.

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