

October 2016 | Data Note

## Kaiser Family Foundation ACA Eligibility Analysis, Technical Appendix D: Uninsured Calibration

Surveys indicate that the number and share of uninsured people declined slightly between 2015 and 2016. To estimate ACA eligibility among the population that remains uninsured as of 2016, we used health insurance status during 2015, as measured by the 2016 Current Population Survey Annual Social and Economic Supplement (CPS-ASEC), as well as estimates of 2016 coverage based on CDC early release estimates from the National Health Interview Survey (NHIS).

The CPS-ASEC 2016 asks respondents to identify the type(s) of health insurance coverage held during the prior calendar year (2015). These coverage estimates produce the official US Census Bureau uninsured rate for 2015 and align relatively closely with the CDC's health insurance coverage estimates from the 2015 NHIS.<sup>1,2</sup> More recent estimates from the NHIS indicate that the number and share of uninsured people continued to drop in early 2016. We therefore use the CPS-ASEC 2016 coverage estimates to calculate ACA eligibility during calendar year 2015; we then use these eligibility estimates to determine which survey respondents who lacked health insurance during 2015 might have gained health insurance coverage in 2016.

Early NHIS estimates for Q1 2016 show 27.1 million nonelderly uninsured Americans, compared to the latest CPS-ASEC which showed 28.5 million nonelderly uninsured in 2015.<sup>3,4</sup> Based on analysis of the growth rates in public versus private coverage in the NHIS 2016, approximately half of the reduction in the uninsured resulted from people moving into public coverage (such as Medicaid) and the other half from people moving into private coverage (such as Marketplace). Since other sources indicate that the Employer-Sponsored Insurance (ESI) market had very little growth between 2015 and 2016,<sup>5</sup> we assumed that reductions in the nonelderly uninsured population resulted from people largely moving into either Medicaid coverage or into the Health Insurance Exchanges (both subsidized and unsubsidized). Based on these assumptions, we sampled about 651,000 nonelderly uninsured individuals in 2015 into Marketplace coverage in 2016 and another 632,000 nonelderly uninsured individuals in 2015 into Medicaid coverage in 2016, bringing our CPS-based estimates into alignment with the latest estimates from NHIS early 2016. Below we describe how we re-assigned coverage types for this analysis. The programming code, written using the statistical computing package R v.3.3.1, is available upon request for people interested in replicating this approach for their own analysis.

### Identifying Uninsured Populations Likeliest to Gain Coverage

We calculated all sources of health insurance coverage for all individuals in 2015, precisely matching US Census Bureau estimates of the uninsured in 2015.<sup>6</sup> Then we assessed each uninsured individual's ACA eligibility for 2015 based on HIU-specific Medicaid- and Marketplace-countable incomes as well as Medicaid/CHIP eligibility criteria and (for Marketplace subsidies) a weighted-average second lowest cost silver premium (SLCSP) for the survey respondent's local area.<sup>7</sup>

This produced an ACA eligibility distribution of the 28.5 million nonelderly uninsured individuals in calendar year 2015 across the following six eligibility categories: Medicaid/Other Public-Eligible; Tax Credit or Basic Health Plan (BHP) Eligible; In the Medicaid Coverage Gap; Ineligible for Coverage Due to Immigration Status; Ineligible for Financial Assistance due to Offer of ESI; Ineligible for Financial Assistance due to Income.

Out of these six categories, only Medicaid/Other Public-Eligible nonelderly uninsured individuals in 2015 were candidates to be sampled into Medicaid coverage in 2016. Nonelderly uninsured individuals in 2015 who were either eligible for Tax Credits/BHP or ineligible due to income were designated as potential candidates to be sampled into Nongroup coverage in 2016.

## Calibration Targets

The CPS-ASEC 2016 shows a 2015 nonelderly uninsured rate of 10.5% (matching the NHIS 2015 estimate), while the NHIS Q1 2016 shows a nonelderly uninsured decline to 10.0% of the population. This difference represents approximately 1.3 million nonelderly uninsured individuals (roughly 163,000 children and 1,120,000 nonelderly adults) who may have gained some form of health insurance coverage during the 2016 open enrollment period.

We fixed the CPS-ASEC uninsured rates for calendar year 2015 to the NHIS early 2016 uninsured rates by age strata, and then attributed proportional shares of private versus public growth to direct purchase coverage gains versus Medicaid coverage gains into 2016. Since other forms of health insurance coverage among the nonelderly population have appeared generally stable (coverage rates in the ESI market have not changed since 2015 and no major policy changes in Medicare affected the nonelderly uninsured population's likelihood to gain coverage through that program), we attributed the gains in coverage to solely Medicaid and Marketplace coverage.

The NHIS early 2016 estimate for children covered by public insurance showed a decrease from 2015 that was not statistically significant; therefore, rather than moving a small number of children from Medicaid or CHIP coverage in 2015 into an uninsured category in early 2016, we set a lower bound and assumed no change for this group over the period. Given that zero children were moved into public coverage in 2016, we shifted all of our estimated 163,000 uninsured children in 2015 who were expected to gain insurance in 2016 into Nongroup coverage.

With the overall target of 1,120,000 nonelderly adults gaining coverage between 2015 and 2016, we relied on the CDC's early estimates of growth rates to allocate these individuals. NHIS Q1 2016 estimates show small gains in both the private market (69.7% in 2015 to 70.2% in 2016, an increase of 0.72%) and in government-provided health coverage (18.9% in 2015 to 19.5% in 2016, an increase of 3.17%). Both of these growth rates were multiplied by the Census Bureau's 2015 estimate of nonelderly adults enrolled in private and public health coverage (143 million and 42 million, respectively) to estimate absolute growth numbers, which were then proportionally scaled down to the overall target of 1,120,000 uninsured nonelderly adults expected to gain coverage in 2016. This resulted in transferring 488,000 uninsured nonelderly adults in 2015 into Nongroup coverage in 2016 and 632,000 uninsured nonelderly adults in 2015 into Medicaid in 2016.

# Sampling Strategy

We selected nonelderly uninsured individuals in calendar year 2015 from the two 2015 ACA eligibility groups described above using random sampling. In neither case were sampling probabilities assigned: each individual in those respective 2015 uninsured populations had an equal chance of selection. Since the imputation of documentation status (discussed in Technical Appendix B) required a multiply-imputed approach and since the offer imputation (discussed in Technical Appendix C) built on the same approach, this tertiary sampling was only conducted once per implicate, keeping the number of implicates to ten.

## ENDNOTES

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<sup>1</sup> Barnett, Jessica C. and Marina S. Vornovitsky, Current Population Reports, P60-257(RV), *Health Insurance Coverage in the United States: 2015*, U.S. Government Printing Office, Washington, DC, 2016. Available at: <http://www.census.gov/content/dam/Census/library/publications/2016/demo/p60-257.pdf>.

<sup>2</sup> Cohen RA, Martinez ME, Zammitti EP. *Health insurance coverage: Early release of estimates from the National Health Interview Survey, 2015*. National Center for Health Statistics. May 2016. Available from: <http://www.cdc.gov/nchs/nhis/releases.htm>.

<sup>3</sup> Cohen RA, Martinez ME, Zammitti EP. *Health insurance coverage: Early release of estimates from the National Health Interview Survey, January – March 2016*. National Center for Health Statistics. September 2016. Available from: <http://www.cdc.gov/nchs/nhis/releases.htm>.

<sup>4</sup> The CPS-ASEC 2016 also contains health insurance coverage information for the interview month (February, March, or April) in early 2016, but these statistics diverge from the NHIS first quarter 2016 estimates. The complete point-in-time health insurance coverage information collected as part of the re-designed CPS-ASEC has not yet been released by the US Census Bureau, so we have chosen to rely on the NHIS quarterly early release estimates which have provided stable estimates of health insurance coverage like the NHIS annual and CPS annual estimates.

<sup>5</sup> Kaiser Family Foundation/Health Research & Education Trust. *2016 Employer Health Benefits Survey*. Section Three: Employee Coverage, Eligibility, and Participation. Available at: <http://kff.org/report-section/ehbs-2016-section-three-employee-coverage-eligibility-and-participation/>

<sup>6</sup> U.S. Census Bureau (2016). *Number of People by Type of Health Insurance Coverage by Selected Demographic Characteristics: 2014 and 2015*. Available at: <http://www2.census.gov/programs-surveys/demo/tables/p60/257/tableA5.pdf>

<sup>7</sup> U. S. Census Bureau. (2016). 2016 Current Population Survey's Annual Social and Economic Supplement User Note. Available at: <http://www.census.gov/topics/income-poverty/guidance/2016-usernote.html>