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Kaiser Family Foundation ACA Eligibility Analysis, Technical Appendix A: Household Construction

In this analysis, income eligibility for both Medicaid and Marketplace subsidies is assessed by grouping people into "health insurance units" (HIUs) and calculating HIU income according to Medicaid and Marketplace program rules. HIUs group people according to how they are counted for eligibility for health insurance, versus grouping people according to who they live with (e.g., "households") or are related to (e.g., "families"). HIU construction is an important step in assessing income as a share of the federal poverty line (FPL) because it impacts whose income is counted (and thus the total income for the unit) and how many people share that income (and thus the corresponding FPL to use for comparison, since FPL varies by family size). Our HIUs are designed to match ACA eligibility rules for both Medicaid and Marketplaces. Below we describe how we construct HIUs 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.

Overview OF KFF-HIUS

We construct two different HIUs for everyone in the sample: a Medicaid HIU and a Marketplace HIU. We use two HIUs because the rules for counting families and income differ between the two programs. For example, in Medicaid, children with unmarried parents have both parents' income counted toward their income, whereas under Marketplace rules, only the income of the parent who claims the child on his/her taxes counts. In another example, certain tax dependents (e.g., a parent) are treated differently for Medicaid eligibility than they are for Marketplace eligibility. To account for these rules, we developed an algorithm for sorting people into HIUs. We construct HIUs and HIU incomes separately for each person in a household and take into account the family relationships and income of the other people in the person's household. People in the same household or in the same family may not have the same HIU composition or income for determining either Medicaid eligibility or eligibility for tax credits.

In simplest terms, the HIU algorithm sorts people into tax filing units. For all people in the data set, the algorithm assesses whether they are likely to be a tax filer themselves and, if so, who they are likely to claim or, if not, who is likely to claim them. It also captures whether someone is neither a tax filer nor claimed as a dependent by someone else. Importantly, the HIU construction considers *all* relationships for *each* person within the household. This step is particularly important in correctly classifying people in non-nuclear families (e.g., households with more than one generation, with unmarried partners, or with relatives outside the nuclear family such as an aunt or uncle), which may contain either one or multiple tax filing units.

In counting income for both Medicaid and Marketplace HIUs, we use modified adjusted gross income (MAGI), corresponding to the ACA rules. MAGI differs from total income in that some sources of income (e.g., cash assistance payments from TANF or SSI) do not count toward MAGI. We calculate HIU income as a share of poverty using the Health and Human Services Poverty Guidelines.[1]

For a small number of people, Medicaid HIU income as a share of poverty does not match Marketplace HIU income as a share of poverty due to the different rules between the programs. This analysis first calculates Medicaid HIU and classifies anyone who meets Medicaid eligibility into that category (including most individuals below 138% FPL in the Medicaid expansion states). We then calculate Marketplace HIU; anyone meeting subsidy eligibility is grouped into that category (above Medicaid and also above 100% FPL up to 400% FPL for most individuals). This approach follows the eligibility rules in the ACA, which specify that people are eligible for tax credits only if they are ineligible for Medicaid.

Steps in Calculating KFF-HIUS

Before we group people into HIUs, we first calculate annual MAGI for each respondent. We compare each person's income to IRS filing requirements for being a tax filer[2] and for being a qualifying relative claimed by someone else.[3]

We then group people into HIUs. We begin this process by grouping everyone within a household who is related into "cohabitating families." Cohabitating families include all family relations; they also include unmarried cohabitating partners and relatives of each cohabitating partner.

Within each cohabitating family, we assess whether any individual is eligible to claim any other individual as a tax dependent. People are eligible to claim others as tax dependents if their income is above the IRS filing threshold for a head of household or, if married, for a married couple. People are eligible to be claimed by others if (a) they are a child (under age 19 or, for tax credits, 23 if a full-time student), and someone else in the cohabitating family has at least twice their income, or (b) they are below the limit to be a tax filer, have income below the qualifying relative limit, and someone else in the cohabitating family has at least twice their income. Within each cohabitating family, we assess who is likely to claim whom, using the assumptions that:

- People who are claimed by others are more likely to be claimed by close relatives (e.g., a parent) than by others (e.g., a grandparent).
- Married couples (who file) file jointly
- If more than one person in a cohabitating family is eligible to claim others within that cohabitating family, the wealthiest person claims the eligible dependents.

Once we determine who within the cohabitating family is likely to claim each other, we know the HIU size and are able to apply income rules for the HIU. We apply Medicaid and Marketplace rules for whose income counts in calculating Medicaid HIUs and Marketplace HIUs, respectively.[4] People who are filers but are not eligible to claim someone else or to be claimed by someone else are an HIU of 1. People who are not filers and are not claimed by filers have their HIU size and income counted according to Medicaid non-filer rules.[5]

Inflation Factors

In order to determine ACA eligibility during calendar year 2016, we compared tax filing unit income against premiums available in 2016.[6] The March 2016 release of the Annual Social and Economic Supplement (ASEC) to the Current Population Survey (CPS) captures personal, family, and household income for calendar year 2015. We relied on the Bureau of Labor Statistics CPI Inflation Calculator to inflate the income of each HIU by approximately 1.5% to align 2015 incomes to 2016 premiums.[7] Since most state Medicaid eligibility determinations through the MAGI pathway are calculated as a percent of HHS Poverty Guidelines for that year and not a fixed dollar amount, inflation was not necessary to assess the Medicaid eligibility of individuals.

After inflating 2015 tax filing unit incomes to match 2016 premiums, we similarly inflated 2015 IRS thresholds for both filing requirements[8] and for qualifying relative tests[9] by the same factor so that these thresholds aligned with the inflated income amounts.

Limitations

As with any analysis, there are some limitations to our approach due to the level of detail that we can obtain from available survey data. Key limitations to bear in mind include:

- We currently are not able to appropriately group anyone who lives outside the household with a household that claims them as a tax dependent. For example, we are not able to connect students living away from home or children with a non-custodial parent with the people who may be claiming them (and whose income should count to their HIU). We are also not able to determine married people who file separately.
- To group people into tax filing units, we have to make assumptions about how people are likely to file their taxes. We assume that tax filers claim qualifying relatives they are able to claim. We make this assumption based on the fact that Medicaid and Marketplace eligibility rules are determined not by who is actually claimed on the tax return but by who is allowed to be claimed. However, people may sort themselves into different tax filing units than we estimate.

ENDNOTES

[1] Medicaid eligibility in 2016 is based on 2016 poverty guidelines, available at: U.S. Department of Health and Human Services, Office of The Assistant Secretary for Planning and Evaluation, Poverty Guidelines. https://aspe.hhs.gov/poverty-guidelines. Tax credit eligibility in 2016 is based on 2015 poverty guidelines, available at: U.S. Department of Health and Human Services, Office of The Assistant Secretary for Planning and Evaluation, 2015 Poverty Guidelines. http://aspe.hhs.gov/2015-poverty-guidelines.

[2] See Internal Revenue Service, Publication 501, Table 1.2015: Filing Requirements Chart for Most Taxpayers. Available at: https://www.irs.gov/publications/p501/ar02.html#en_US_2015_publink1000270109

[3] See Internal Revenue Service, Publication 501, Qualifying Relative. Available at: https://www.irs.gov/publications/p501/ar02.html#en_US_2015_publink1000220939

[4] A detailed explanation of Medicaid and Marketplace income counting rules can be found in Center on Budget and Policy Priorities webinar available at: http://www.healthreformbeyondthebasics.org/wp-content/uploads/2013/08/Income-Definitions-Webinar-Aug-28.pdf

[5] A detailed explanation of Medicaid and Marketplace HIU size calculations can be found in the Center on Budget and Policy Priorities webinar available at http://www.healthreformbeyondthebasics.org/wp-content/uploads/2013/08/Household-Definitions-Webinar-7Aug13.pdf

[6] This is the same underlying data as the 2016 Health Insurance Marketplace Calculator. Available at: http://kff.org/interactive/subsidy-calculator/ For a more detailed examination of plans available in the Health Insurance Marketplaces in 2016, see Kaiser Family Foundation, Analysis of 2016 Premium Changes and Insurer Participation in the Affordable Care Act's Health Insurance Marketplaces. Available at: http://kff.org/health-reform/issue-brief/analysis-of-2016-premium-changes-and-insurer-participation-in-the-affordable-care-acts-health-insurance-marketplaces/

[7] See Bureau of Labor Statistics, CPI Inflation Calculator. Available at: http://www.bls.gov/data/inflation_calculator.htm

[8] See Internal Revenue Service, Publication 501, Table 1.2015: Filing Requirements Chart for Most Taxpayers. Available at: https://www.irs.gov/publications/p501/ar02.html#en_US_2015_publink1000270109

[9] See Internal Revenue Service, Publication 501, Qualifying Relative. Available at: https://www.irs.gov/publications/p501/ar02.html#en_US_2015_publink1000220939