UNDERSTANDING PARTICIPATION RATES IN MEDICAID: IMPLICATIONS FOR THE AFFORDABLE CARE ACT

By Ben Sommers, Rick Kronick, Kenneth Finegold, Rosa Po, Karyn Schwartz, and Sherry Glied

In 2014, the Affordable Care Act (ACA) will extend Medicaid eligibility to all U.S. citizens and qualified residents with family incomes at or below 133% of the Federal Poverty Level (FPL).1 The extent to which expanded eligibility will improve coverage depends on the rate at which the newly-eligible enroll in the program. While many other factors also affect cost and enrollment projections for Medicaid,2 this issue brief focuses on our current knowledge regarding Medicaid participation rates (or “take-up”), now and under the ACA.

Methodological Approaches and Challenges in Estimating Take-Up

Take-up can be defined in several ways, depending on the program and population in question. Generally speaking, it is a participation rate, ranging from 0 to 100%, and measures the fraction of people who are eligible for a program who choose to enroll. Factors that have been shown to impact take-up include the benefits of the program to the intended beneficiaries, information and transaction costs in enrolling, and stigma.3 Researchers have taken a variety of approaches in defining the numerator (participants) and the denominator (total eligible) for a given program. For instance, in defining Medicaid take-up, many – but not all – researchers exclude from the denominator people who have other forms of insurance.4,5 Some researchers include in the numerator Medicaid-like public insurance programs that may be offered in a state, while others limit their analysis to Medicaid itself, which can lead to varying estimates even within the same state. Another challenge is addressing immigration status, which is a criterion for eligibility but is not typically measured in surveys. Some researchers address this issue by excluding non-citizens from the denominator; others include non-citizens and attempt to make informed guesses about their likely immigration status. Finally, survey

1 The statutory cutoff is 133%, but the Affordable Care Act includes an income disregard that yields an effective cutoff of 138% of FPL.
2 Prior research shows that the other main factors in Medicaid cost projections for the Affordable Care Act include the choice of dataset, how one treats family income when estimating Medicaid eligibility, and costs per new Medicaid enrollee, none of which we address in this brief. Sommers, B.D., Swartz, K., Epstein, A.M. (2011). “Policy Makers Should Prepare for Major Uncertainties in Medicaid Enrollment, Costs, and Needs for Physicians under Health Reform.” Health Affairs. 30(11): 2186-2193.
income does not correspond precisely to how states measure income for the purposes of Medicaid eligibility, adding uncertainty into estimates of eligibility.

The choice of dataset is also a key question. Administrative data alone cannot be used to estimate take-up, because these sources do not capture individuals who are not enrolled in the program. The most common approach is to use national survey data, which has the advantage of including both people in the program and those who are eligible but not enrolled. One limitation is that most national surveys have been shown to undercount those with Medicaid coverage, as some people mistakenly report private coverage and others say they are uninsured. To mitigate these effects, some researchers attempt to correct for the undercount when analyzing survey data.

An alternative approach involves combining administrative counts of Medicaid enrollment with survey counts of eligible uninsured people. This approach may overestimate true take-up, since it includes all enrollees in the denominator, but typically excludes some uninsured eligibles due to imprecision in the survey data (whereas exclusive use of survey data avoids this bias by using a consistent definition of eligibility for both enrolled and uninsured people).

Two additional considerations are critical in projecting future take-up rates. The first is timing. New programs may take several years to reach full implementation. Providers, potential beneficiaries, and program administrators are likely to learn more about a program over time, which means that initial take-up rates may be significantly lower than what programs achieve at the eventual so-called “steady-state.” A second concern is the distinction between average and marginal take-up. Average take-up is a measure of participation among all eligible people. In the context of an eligibility expansion, the marginal take-up rate is a measure of participation only among newly-eligible people. Typically, marginal take-up is lower than average take-up; people who have been eligible for a program for several years usually participate at higher rates than those newly-eligible. This is partly because it takes time to learn about programs. It is also, in part, because initial eligibility criteria for programs such as Medicaid typically target those with the greatest need (e.g. very low incomes, significant health needs due to disability), while expansions target people at higher incomes and without disabilities who are likely to have less contact with the health care and social services systems.

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7 The primary source of this bias is caused by so-called ‘ineligible reporters,’ individuals who report having Medicaid coverage in a survey but do not appear to be eligible based on the available survey information. These individuals may be eligible based on ‘medical need’ or specific disease diagnoses which are generally not measured in survey data; rapidly fluctuating income with transient eligibility; misreported income to the survey or to the state Medicaid office; and other possible pathways. Including these ineligible reporters in the numerator biases take-up upwards, since there are presumably also eligible individuals who are not enrolled in Medicaid who would meet similar pathways, but who are excluded from the denominator (since they cannot be identified in the survey). Approaches combining administrative data and survey data suffer a similar bias, since the administrative counts include all enrollees, even those via eligibility pathways that cannot be identified in survey data. Furthermore, administrative counts likely include people who do not know they are covered (and in some cases may have left the state or even died). For further discussion of these and other limitations of administrative enrollment estimates, see Dubay L, Holahan J, Cook A. (2007). “The Uninsured and the Affordability of Health Insurance Coverage.” Health Affairs. 26(1): w22-w30.
All of these issues make estimating take-up challenging, and suggest one should use caution in comparing results from different analyses. Nonetheless, the research literature does provide numerous insights into understanding take-up in Medicaid and related programs.

**Medicaid Take-up Among Adults, Prior to the Affordable Care Act**

Certain groups of non-elderly adults with incomes below 133% of FPL are already eligible for Medicaid – primarily low-income parents in some states and people with disabilities who are receiving Supplemental Security Income (SSI). Table 1 summarizes estimates of Medicaid take-up among adults from previous research.

Davidoff and colleagues used the 1999 National Survey of America’s Families (NSAF) to analyze adult take-up rates. After excluding those with SSI, they estimated that among Medicaid-eligible adults without private coverage, 54% were enrolled in Medicaid nationally, with a range from 36% in Mississippi to 81% in Massachusetts.\(^8\) The same authors repeated their analysis with 2002 data, and estimated a 52% take-up rate nationally, with a range from 32% in Texas to 76% in Massachusetts.\(^9\)

Sommers & Epstein (2010) used data from the Current Population Survey (CPS) from 2007-2009 to examine participation in Medicaid among adults ages 19-64 (including those with disabilities). They found that among eligible adult U.S. citizens without private health insurance, 62% percent currently participate in the program. Participation rates vary by state – three states have rates of less than 44% (Oklahoma, Oregon, and Florida) while two states have rates of more than 80% (Massachusetts at 80% and DC at 88%).\(^10\) The authors also found that states that will experience the largest eligibility expansions under the Affordable Care Act are generally those with the lowest rates of take-up in their existing programs.

Another recent analysis, which imputed immigration status for non-citizens, used the American Community Survey (ACS) to estimate take-up rates for two different categories: first, full Medicaid benefits, and then a more inclusive denominator of traditional Medicaid plus more limited benefits available in certain states under Section 1115 waivers or state-funded programs, which feature less comprehensive benefits or higher cost-sharing requirements. For traditional Medicaid, the authors estimated a national take-up rate among adults in 2009 of 68.2%, with a range from 51.4% in Nevada to 93.7% in Massachusetts. Lower participation rates were found when the population eligible for more limited Medicaid coverage was included in the denominator (see Table 1). Moreover, a participation rate of 80.1% was found among childless adults in Massachusetts (under a Section 1115 Medicaid waiver) with incomes below 138 percent of the FPL, who constitute the primary target population of the ACA’s Medicaid expansion.\(^11\)

Both of these recent studies adjusted take-up rates upwards to account for the likely undercount of Medicaid enrollment in the CPS and ACS surveys. Perhaps more importantly, both of these studies included SSI recipients in their samples. Since SSI recipients participate at significantly higher levels

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than those without disabilities (and are automatically enrolled in Medicaid in most states), estimates from these studies may be significantly higher than what would be expected to occur in expansions of eligibility to non-disabled, higher income adults.

Most take-up estimates in the literature come from survey data. However, an analysis by the Urban Institute using administrative counts combined with survey data estimated that 80.7% of adults nationally were enrolled in Medicaid/CHIP in 2006, and 81.3% in 2008. As discussed in the previous section, combining administrative and survey data in this way may lead to upward-biased estimates.

Thus, depending on the method and dataset, there is significant uncertainty about average national Medicaid take-up among adults, with estimates ranging from 52% to 81%, and all but one data source estimating national average rates under 70%.

There are fewer estimates in the literature of marginal take-up among adults, since major expansions among adults have been relatively uncommon. One study of eligibility expansions for pregnant women in the 1980's estimated a 34% marginal take-up rate, though this number included privately insured women in the denominator. Another study of expansions to low-income adults estimated a 32.3% take-up rate among newly-eligible uninsured adults (and 14.8% overall take-up, including those with private insurance in the denominator). Several other studies that estimated adult coverage gains after eligibility expansions (with estimates ranging from 2 to 26 percentage point gains among low income adults) did not provide a relevant denominator of eligible adults that would allow for direct comparison to these other results. Neither of these prior expansions were as large as that created by the Affordable Care Act, and analysts have generally assumed that marginal take-up rate for the 2014 expansion will be significantly higher than these estimates.

### Table 1: Estimates of Medicaid Take-Up Among Adults*

<table>
<thead>
<tr>
<th>Study</th>
<th>Data Source</th>
<th>National Take-up</th>
<th>State Range in Take-Up</th>
<th>Comment</th>
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<tbody>
<tr>
<td><strong>MARGINAL TAKE-UP</strong></td>
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<tr>
<td>Currie &amp; Gruber (1996)</td>
<td>CPS, 1979-1992</td>
<td>34%</td>
<td>N/A</td>
<td>Expanded coverage to pregnant women; did not exclude private insurance</td>
</tr>
<tr>
<td>Busch &amp; Duchovny (2005)</td>
<td>CPS, 1995-2001</td>
<td>32.3%</td>
<td>N/A</td>
<td>Expanded coverage to low-income parents; among newly-eligible uninsured adults</td>
</tr>
</tbody>
</table>

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<tr>
<th>AVERAGE TAKE-UP</th>
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<tr>
<td><strong>Davidoff et al. (2004)</strong></td>
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<td><strong>TRIM (2006)</strong></td>
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<td><strong>TRIM (2008)</strong></td>
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<tr>
<td><strong>Sommers &amp; Epstein (2010)</strong></td>
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<tr>
<td><strong>Kenney et al. (2012)</strong></td>
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<td><strong>Kenney et al. (2012)</strong></td>
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**NOTES:**
*Unless otherwise noted, take-up refers to the rate of Medicaid enrollment among those eligible for Medicaid and without another source of coverage.
†State-specific rates only available for 13 selected states.
\(^\circ\)State range includes Washington DC when available.

**Medicaid Take-up Among Children, Prior to the Affordable Care Act**

There have been even more studies of public insurance take-up among children; these also offer insights relevant to the Affordable Care Act. Prior research suggests that the take-up of Medicaid (and the Children’s Health Insurance Program [CHIP]) is generally greater among children than among adults. Eligible children are more likely than adults to have other contacts with social service programs, organized day care programs, and schools, making outreach and enrollment easier. Tremendous efforts have been made to enroll eligible children, including aggressive outreach and simplified eligibility determination and redetermination processes. Moreover, some states use continuous 12-month eligibility and Express Lane Eligibility for children, options not available for adults.

Recent analyses by the Urban Institute used data from the ACS for 2008 and 2009 to estimate national and state participation rates in Medicaid and CHIP. The authors found that among eligible children without private coverage, 82.1% participated in Medicaid or CHIP in 2008 and 84.8% in 2009. Again, rates varied widely by state. In 2008, take-up ranged from 57.0% in Nevada to 95.2% in Massachusetts and 96.1% in D.C. In 2009, take-up rates in these same states ranged from 62.9% to 96.0% and 97.0%, respectively.

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17 Kenney et al. (2011).

18 Kenney et al. (2011).
Overall, policies to improve take-up for children have been extremely effective, but also show that efforts to improve take-up can take several years to implement successfully, particularly for new programs. Notably, CHIP experienced very gradual enrollment in the years following the program’s enactment. Five years elapsed before CHIP achieved enrollment even close to its current level.\(^{19}\) Numerous studies of Medicaid expansions and the creation of CHIP estimate marginal take-up rates ranging from 10% to 30% among newly-eligible children, though all of these studies include those with private insurance in the denominator, which lowers the take-up rate estimates and makes them not directly comparable to the studies cited earlier.\(^{20}\)

Take-Up in Other Public Programs
Take-up has been estimated at 72-83% for unemployment benefits, 80-86% in the Earned Income Tax Credit program, and 54-71% in the Supplemental Nutritional Assistance Program.\(^{21}\) Take-up of low-income subsidies in Medicare Part D has been estimated at 40% among eligible people not automatically enrolled in the program, though a minority of these enrollees (22% as of 2010) do have to pay monthly premiums, which is a deterrent not applicable to Medicaid. If one includes in the calculation those who were automatically enrolled (which is not an option in Medicaid), the take-up of Part D subsidies is approximately 82%.\(^{22}\) Medicare Part A – which enrolls individuals automatically following an application for Social Security retirement or disability benefits – has a 99% take-up rate, while Part B – which enrolls individuals from Part A automatically unless the individual opts out – has also achieved a very high take-up rate (95.5%).\(^{23}\) However, Medicare uses automatic enrollment and, unlike programs designed specifically for low-income people, does not require income information to determine eligibility. Enrolling in Medicare bears little resemblance to the Medicaid application process.

Overall, these results suggest that current Medicaid participation rates are in the same general range as those of many other public programs for low-income people, and that Medicaid participation rates for children are at the high end of this general range.

Enrollment Projections Under the Affordable Care Act
The Affordable Care Act makes significant changes to the Medicaid program designed to facilitate enrollment and produce high rates of coverage. First, it creates a system in which all citizens and legal permanent residents up to 400% of FPL who do not receive affordable coverage through their employers will be eligible for Medicaid or premium tax credits for coverage purchased in Affordable Insurance Exchanges (Exchanges). The law calls on states to streamline the application process in order to create a


\(^{22}\) Currie (2004), Remler & Glied (2003).


\(^{24}\) Remler & Glied (2003).
single portal of entry for Medicaid, CHIP, and coverage purchased in the Exchanges, which means that people will not need to know what program they are eligible for when they apply. Other important changes include a new uniform eligibility standard for all adults based only on income; new simpler rules for determining income eligibility; and the personal responsibility requirement. The high federal match rate for newly-eligible adults will provide additional incentive to states to enroll such people. These steps are expected to improve Medicaid take-up rates, building on the success of improved outreach and enrollment for children.

On the other hand, several factors may make it difficult for take-up in the Medicaid expansion after 2014 to match current Medicaid participation rates. First, the new population eligible for Medicaid under the ACA will be primarily childless adults without disabilities, who have historically had significantly lower take-up rates than parents and those with disabilities. Currently, parents comprise approximately 45%, people with disabilities comprise 35%, and childless adults make up the remaining 20% of Medicaid adults. In contrast, among uninsured adults under 138% FPL who will be Medicaid-eligible in 2014, parents comprise roughly 35%, disabled adults comprise 10-15%, and childless adults make up the remaining 50-55% of the population. Second, the states with the largest number of low-income uninsured adults who stand to gain from the Medicaid eligibility expansion are also the states that typically have had much lower Medicaid take-up rates at baseline. Whether the effects of provisions of the Affordable Care Act will outweigh these factors is unclear, resulting in a great deal of uncertainty about Medicaid projections going forward.

Building on prior research, several analysts have attempted to project the program’s growth over the coming decade. The most widely-cited estimate comes from the Congressional Budget Office (CBO), which projected that an additional 16 million people will enroll in the program in 2019. Recently released 2012 projections from CBO updated that figure to 17 million due to changes in economic trends and recent legislation, though these published numbers are rounded to the nearest million, and the net change from their prior estimate was less than 500,000. While CBO does not release details on its assumptions, two outside analyses have assessed that a Medicaid take-up rate of between 55% and 57% of newly-eligible uninsured adults could produce such a number, though differences in datasets and other assumptions make it difficult to know how close these figures are to CBO’s actual take-up assumptions. Internal analysis at ASPE using more recently released projections from CBO suggests that the agency may be assuming a take-up rate among newly-eligible uninsured adults closer to 66-

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26 For instance, more than 1.4 million uninsured adults in Texas and 700,000 in Florida are predicted to enroll in Medicaid, second and third in number only to California, and both states have current take-up rates well below the national average. Meanwhile, California’s take-up rate is comparable to the national mean. Holahan & Headen (2010). Sommers & Epstein (2010).
70%.

However, these are only derived estimates and should be interpreted with caution, since CBO has not released its actual assumptions regarding take-up.

Many of the other published projections for the Affordable Care Act have assumed rates higher than the 55-70% take-up rate derived from CBO projections. Researchers at the Lewin Group recently published an independent analysis predicting that 14.6 million adults (using 2011 population estimates) would enroll in the program, based on a take-up rate of 74% among new eligibles without employer coverage, which they estimated based on pre-ACA participation rates. Researchers at Harvard used the Sommers & Epstein estimate of 62% take-up to project enrollment of 13.4 million by 2019; the authors discuss the possibility that streamlined enrollment and the personal responsibility requirement will improve take-up, but also consider that these effects may be counterbalanced by low baseline enrollment rates and lower levels of political support for Medicaid expansion in many states.

An analysis from the RAND Compare model predicted that 82% of newly-eligible currently uninsured adults would enroll in Medicaid under the Affordable Care Act, and that overall the expansion would cover an additional 19.2 million people by 2016; their analysis factors in the effect of the personal responsibility requirement but does not model any impact of a streamlined application process. An analysis by the Urban Institute, in a scenario with higher participation due to “enhanced outreach,” concluded that take-up of 75% among newly-eligible adults might be attainable, with enrollment as high as 22.8 million people by 2019. In its “standard participation” scenario, Urban used a take-up rate of 57% among newly-eligible uninsured adults, resulting in an overall expansion of 15.9 million.

Estimates from the Office of the Actuary at the Center for Medicare and Medicaid Services (CMS) assume participation rates of 95% among newly-eligible uninsured adults, with resulting enrollment projections higher than those of other published projections – 26 million additional people in Medicaid by 2020. This level of participation is significantly higher than any published estimate of average Medicaid take-up rates among adults, and exceeds current national participation among children, for whom policies are in place in many states to facilitate enrollment – such as 12-month continuous eligibility – that are not available for adults under the Affordable Care Act. It is also higher than take-up rates in other public programs that serve low-income people. The Office of the Actuary explains in its 2010 report (in which they assumed a 97% take-up rate among newly-eligible adults) that the “assumed participation rate is significantly higher than actual Medicaid participation rates to date and is based on

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30 CBO’s 2011 report states that they are projecting 17 million additional Medicaid/CHIP enrollees by 2021, with approximately 6 million individuals still eligible but uninsured for the program. Based on other estimates, we assume that roughly 40% of this enrollment comes from previously-eligible adults and children and those with private insurance (see Sommers et al., 2011). If we allow for 1-2 million of the 6 million eligible uninsured individuals to be previously-eligible, this leaves approximately 10 million newly-enrolled uninsured adults (17M *60%) out of 14 or 15 million, for a take-up of roughly 66-70%. Elmendorf, DW. “Statement of Douglas W. Elmendorf, Director: CBO’s Analysis of the Major Health Care Legislation Enacted in March 2010.” Washington (DC): Congressional Budget Office; 2011 Mar 30. Available from: http://www.cbo.gov/ftpdocs/121xx/doc12119/0330-healthcarelegislation.pdf


32 Sommers et al., 2011.

33 RAND COMPARE (2012). Santa Monica, CA: RAND Corporation. Unpublished estimates provided directly to ASPE as part of a contract with HHS.

34 Holahan & Headen (2010).

35 The Office of the Actuary describes, “The effective participation rate of persons who would have been uninsured for a full year, but are newly eligible for Medicaid as a result of the Affordable Care Act, is assumed to be 95 percent.” If those with private insurance are included in the denominator, the participation rate declines to 87%, and if ineligible immigrants are included, it declines further to 77%, though these statistics are no longer comparable to other estimates in the literature. Centers for Medicare and Medicaid Services, Office of the Actuary. (2012). 2011 actuarial report on the financial outlook for Medicaid. Baltimore, MD.
the anticipated impacts of sections of the Affordable Care Act intended to make the process of enrolling easier.\textsuperscript{36}

Table 2 summarizes these various projections of take-up and overall enrollment in Medicaid under the Affordable Care Act. As stated earlier, take-up is an important factor in overall Medicaid enrollment projections, but is not the only factor – estimates of the size and income distribution of the uninsured population, economic trends, population growth, and the choice of data set all affect these results as well.

**Table 2: Projections for Medicaid Take-Up and Enrollment Under the Affordable Care Act**

<table>
<thead>
<tr>
<th>Source</th>
<th>Medicaid Take-Up Among Newly-Eligible Uninsured Adults</th>
<th>Projected New Medicaid Enrollment</th>
<th>Comment</th>
</tr>
</thead>
<tbody>
<tr>
<td>Sommers et al., 2011</td>
<td>62%</td>
<td>13.4 million</td>
<td>By 2019</td>
</tr>
<tr>
<td>Sheils &amp; Haught, 2011</td>
<td>74%</td>
<td>14.6 million</td>
<td>Using 2011 population size</td>
</tr>
<tr>
<td>Holahan &amp; Headen, 2010</td>
<td>57%</td>
<td>15.9 million</td>
<td>By 2019 - ‘standard outreach’</td>
</tr>
<tr>
<td>Congressional Budget Office, 2010</td>
<td>N/A</td>
<td>16 million</td>
<td>By 2019</td>
</tr>
<tr>
<td>Congressional Budget Office, 2012</td>
<td>N/A</td>
<td>17 million</td>
<td>By 2016</td>
</tr>
<tr>
<td>RAND Compare, 2012</td>
<td>82%</td>
<td>19.2 million</td>
<td>By 2016</td>
</tr>
<tr>
<td>Holahan &amp; Headen, 2010</td>
<td>75%</td>
<td>22.8 million</td>
<td>By 2019 - ‘enhanced outreach’</td>
</tr>
<tr>
<td>CMS Office of the Actuary, 2012</td>
<td>95%</td>
<td>25.9 million</td>
<td>By 2020</td>
</tr>
</tbody>
</table>

While there is uncertainty about the precise number of people who are likely to enroll in Medicaid through this expansion, there is consensus among researchers that significantly more than ten million previously uninsured low-income Americans will gain access to health insurance through the Medicaid expansion under the Affordable Care Act.