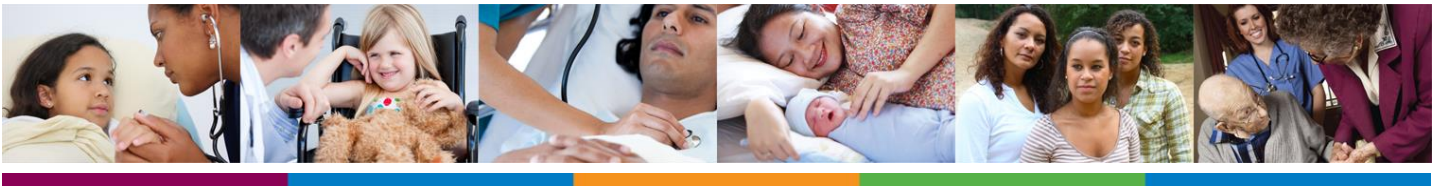


# The Continuity of Medicaid Coverage: An Update

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Leighton Ku, PhD, MPH, and Erika Steinmetz, MBA  
George Washington University

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Medicaid provides critical health insurance coverage to tens of millions of children, adults, elderly and people with disabilities every year. Under the Affordable Care Act (ACA), millions more will gain Medicaid coverage, beginning in 2014.<sup>1</sup> However, Medicaid can be like a leaky sieve: every year millions of people enroll, only to subsequently lose their coverage, even though they are still eligible, due to cumbersome paperwork requirements and small, often short-term, increases in income. The problem of beneficiaries entering and exiting Medicaid is sometimes called “churning.”

These interruptions in coverage can compromise the continuity and effectiveness of health care services. Helping Medicaid enrollees retain their coverage is a cost-effective way to make their insurance coverage more secure and to improve the effectiveness of the care they receive. In July 2009, George Washington University researchers authored a report which included data about the continuity of coverage in Medicaid in every state in 2006.<sup>2</sup> This report updates that information, including data from 2010 and 2011, using data reported as of March 2013. Briefly, we find that the national average continuity of Medicaid coverage improved modestly, from an average of 78.5 percent in 2006 to 81.2 percent in 2010-11, although there are still large differences across the states.

## **Why Does Continuity of Coverage Matter?**

When people are uninsured, they have more difficulty affording care and, thus, have poorer access to care. This can occur even when there are relatively brief gaps in their insurance coverage. Interruptions in insurance coverage can mean that sick people cannot afford to visit the doctor or pay for their prescription medications, so they delay and avoid care. They may also avoid preventive care, like vaccinations, cancer or blood pressure screening, increasing the risk of illness or lowering the potential for early, cost-effective treatment. Medical research has shown that many serious chronic diseases can be controlled through effective and ongoing care. Even brief interruptions in Medicaid coverage can lead to significant increases in hospitalizations for chronic diseases like diabetes, asthma and mental disorders.<sup>3</sup> People may become sicker and health care costs can escalate when there are gaps in coverage.

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<sup>1</sup> As originally enacted, Medicaid coverage would be extended to non-elderly adults with incomes up to 138 percent of the poverty line in 2014. However, a Supreme Court decision grants states the option to expand Medicaid. It is not yet clear which states will implement a Medicaid expansion or when.

<sup>2</sup> Ku L., MacTaggart P, Pervez F, Rosenbaum S. “Improving Medicaid’s Continuity and Quality of Care,” Association for Community Affiliated Plans, July 2009.

<http://www.communityplans.net/Portals/0/ACAP%20Docs/ACAP%20MCOA%20Report.pdf>. For more information, see

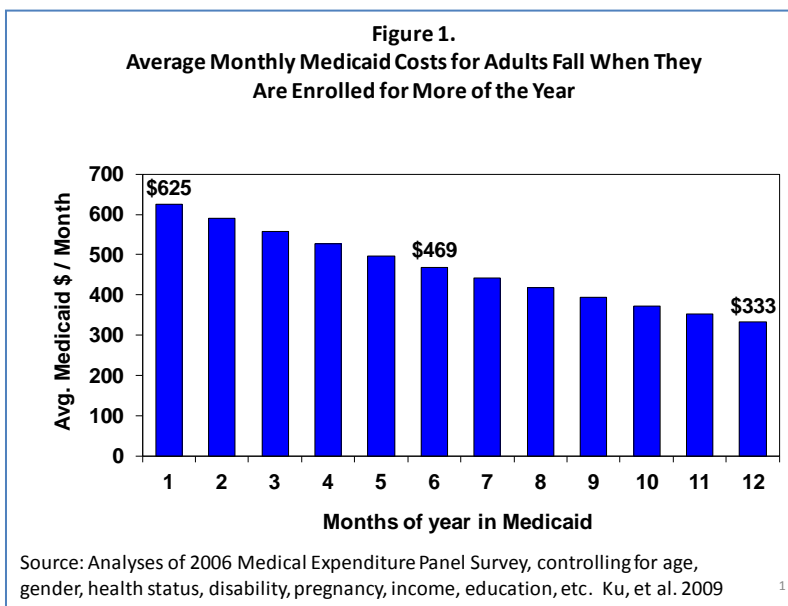
<http://www.communityplans.net/PolicySupport/PolicySupport.aspx?tabid/313/Default.aspx>.

<sup>3</sup> Bindman, A., et al. “Medicaid re-enrollment policies and children's risk of hospitalizations for ambulatory care sensitive conditions.” *Med Care*. 2008;46(10):1049-54. Bindman, A., et al. “Interruptions in Medicaid Coverage and Risk for Hospitalization for Ambulatory Care–Sensitive Conditions.” *Ann. Intl. Med*. 2008; 149: 854-60. Hall AG, Harman JS, Zhang J. “Lapses in Medicaid coverage: impact on cost and utilization among individuals with diabetes enrolled in Medicaid.” *Med Care*. 2008 Dec;46(12):1219-25. Harman, JS, Manning, WG, Lurie, N, Christianson, JB. “Association Between Interruptions in Medicaid Coverage and Use of Inpatient Psychiatric Services.” *Psychiatr Serv*. 2003 Jul;54 (7):999-1005.

One consequence of this is that standard methods of measuring the quality of care in managed care plans usually involve measurements for people who are covered for a year or more; the presumption is that those who have been enrolled for less than a year have not been exposed to enough care to measure quality or to experience health-promoting quality effects.

Those enrolled in Medicaid are more prone to interruptions in coverage than those with job-based insurance. Typically, with job-based coverage, employees sign up at work and stay enrolled through the next “open season” or until they change jobs. But it is harder to enroll or renew enrollment in Medicaid and there are requirements that beneficiaries must periodically report changes in income, residency or other factors. Thus, a person who has been certified for 6 or 12 months of enrollment may lose coverage after just 3 months if he or she fails to submit a periodic report in the proper fashion.

In earlier analyses, we found that improved continuity of coverage in Medicaid was more efficient and substantially lowered average monthly costs per enrollee.<sup>4</sup> Analyses of the 2006 Medical Expenditure Panel Survey found that an adult enrolled for just one month in 2006 had an estimated average expenditure of \$625, while an adult enrolled for six months would have average expenditures of \$469 per month and an adult enrolled for 12 months would have average expenditures of \$333 per month. While it is intuitive to believe that



the cost of Medicaid services for a person enrolled 12 months would be *twice* as high as a person enrolled six months, this analysis shows that this is not the case. The cost of 12 months of coverage (\$3,996) is only 42 percent more than the cost for six months (\$2,814).

There are two reasons for these savings. First, when people are enrolled for longer periods, they may get the primary and preventive care that keeps them healthy and reduces costs. Second, people often enroll in insurance when they have a medical need, and therefore would have higher initial levels of health care utilization just after enrollment. As they remain enrolled for longer periods, their health needs normalize and they need less care later in the year.

### Measuring Continuity of Medicaid Coverage

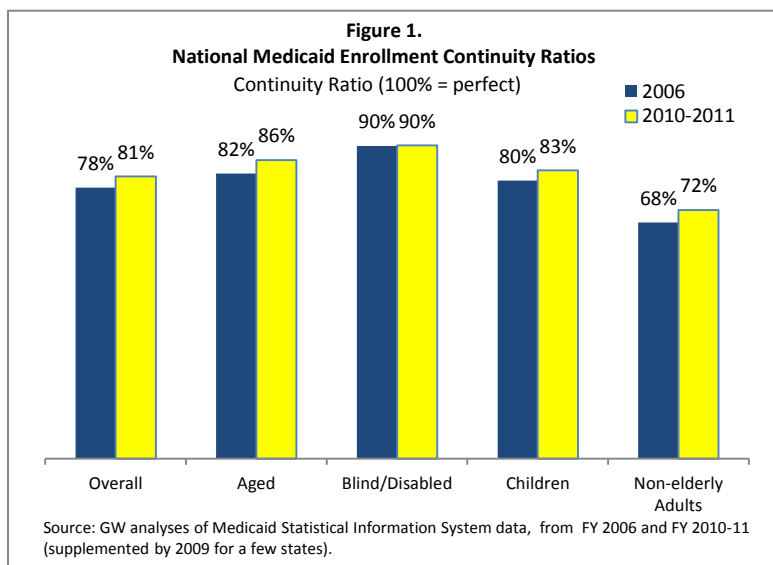
In the 2009 report, we developed the Medicaid enrollment “continuity ratio.” It measures the average proportion of a fiscal year that beneficiaries are enrolled; it essentially measures the length of enrollment during the year. It is computed by dividing the average monthly number of

<sup>4</sup> Ku, et al. 2009

Medicaid enrollees during a fiscal year by the total number of unduplicated people enrolled in Medicaid at any time over the year. This provides a measure of Medicaid enrollment continuity, but we do not know the extent to which beneficiaries had other coverage or were uninsured for the rest of the year.

A score of 100 percent would mean the average monthly enrollment and total annual unduplicated enrollment are the same, indicating that everyone was enrolled for the entire year. A score of 8.3 percent would mean that there was a 100 percent turnover in enrollees each month (so the total unduplicated number enrolled over the year is 12 times the number enrolled in any month). These data are based on administrative data reported by state Medicaid agencies in the Medicaid Statistical Information System (MSIS) datamart. The accuracy of these computations is limited by the accuracy and timeliness of MSIS data as reported by states and CMS. For example, if a state modified its computer systems, data may differ from one year to the next.

In Figure 1, we present comparisons of continuity ratios in FY 2006 and FY 2010-11. The most recent period includes FY 2011 for 25 states, FY 2010 data for 21 states and FY 2009 data for 5 states, based on the data available as of March 2013. The FY 2006 data are complete for all states. We have classified enrollees as aged, blind or disabled, children or non-elderly adults. A small number have unknown status and are included in the overall counts, but not the categories.



As seen in Figure 1, there were modest improvements in continuity between 2006 and 2010-11. The overall national average continuity ratio increased from 78 to 81 percent, which means that an average person enrolled in Medicaid was covered for a little more than three-quarters of the year and lacked Medicaid for the remaining quarter. The continuity ratio is higher and remains unchanged (90 percent) for those who are blind or disabled. The aged and children are the next highest, with averages of 86 percent and 83 percent, respectively. The ratio for non-elderly, non-disabled adults (primarily low-income parents) is by far the lowest, at 72 percent. This indicates that the extent of interrupted coverage is most severe for the non-elderly adults, such as parents, on Medicaid.

The likely explanation for greater continuity among the aged and blind/disabled enrollees is that they are often living on fixed incomes and tend to be enrolled for longer certification periods. Moreover, their Medicaid coverage is often linked to cash assistance under the Supplemental Security Income (SSI) program, so they can jointly renew coverage for both Medicaid and SSI. While continuity ratios for these populations are greater, the impact of losing

eligibility – even for a short period of time – is very significant, since these individuals are the most likely to have chronic illnesses and conditions which require ongoing treatment and monitoring. Children may have greater continuity because states have been encouraged, particularly under the Children’s Health Insurance Program Reauthorization Act of 2009 (CHIPRA), to simplify enrollment and renewal procedures in Medicaid.<sup>5</sup> For example, in 2011, 23 states had adopted 12 months continuous eligibility for children.<sup>6</sup> (Comparable options are not available for other populations, except pregnant women, who can continue their eligibility through 60 days postpartum.) Even with simplified renewal procedures for children, however, there can be problems if these same procedures do not apply for their parents, making it more difficult for a whole family to renew coverage at the same time.

Table 1 presents state-level data on continuity of Medicaid coverage in the FY 2010-11 period. We present two versions of an overall ratio: one is the overall *unadjusted* ratio and one is the overall *standardized* ratio. Because the ratios vary so much by eligibility category, a state’s unadjusted ratio is strongly affected by the state caseload composition. That is, a state with a high percentage of disabled and a low percentage of adults would naturally have a higher overall continuity ratio than a state which has the same enrollment policies but more adults and fewer disabled. The standardized ratio attempts to adjust for these caseload differences by treating all states as if they had the same proportions of aged, disabled, children and adults, based on the national averages. The standardized ratio, thus, better reflects the policy component of a state’s enrollment policies. Based on the standardized enrollment continuity ratios, the ten states with the best continuity of coverage are Ohio, Tennessee, New York, Connecticut, New Mexico, Hawaii, Arizona, Rhode Island, Louisiana, and Illinois; ratios for these states range from 84.5 percent to 88.6 percent. The ten states with the lowest continuity of coverage are Utah, Texas, Colorado, Nevada, Idaho, Florida, Georgia, Kansas, Wyoming, and North Dakota, with ratios between 68.8 percent and 76.5 percent (see Appendix A for state-level trended data for years 2006-2011).

The continuity ratio essentially measures the average level of enrollment during a fiscal year. It has limitations. The reference period is the federal fiscal year. A person who enrolls in April 2010 and remains covered for one year would have 50 percent continuity in FY 2010 and 50 percent in FY 2011. Similarly, a person who was enrolled October to March, then experience a one-month gap and re-enrolled from April to September has 11 months of coverage, the same as someone continuously enrolled from October through August. Finally, as noted earlier, we do not know whether a person has other coverage or is uninsured for the rest of the year. These limitations are inherent in the nature of the MSIS data source. The accuracy of data is limited by the accuracy of MSIS data. For example, if a state modified its eligibility system, reports for one year might not be compatible with another year.

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<sup>5</sup> Under CHIPRA, states may receive performance bonuses if they adopt at least 5 out of 8 policies to simplify children’s enrollment or retention, including continuous eligibility, and they attain targeted levels of enrollment growth for children. See Mann, C. State Health Official Letter 09-015, CHIPRA Performance Bonus Payments, Centers on Medicare and Medicaid Operations, December 15, 2009.

<sup>6</sup> Heberlein M, et al. Getting into Gear for 2014: Findings from a 50 State Survey of Eligibility, Enrollment, Renewal and Cost-sharing Policies in Medicaid and CHIP, 2012-13. Kaiser Commission on Medicaid and the Uninsured, Jan. 2013.

Table 1. Enrollment Continuity Ratios for State Medicaid Programs, FY2010/11

	Overall Unadjusted Ratio <sup>1</sup>	Aged	Children	Blind/Disabled	Non-elderly Adults	Overall Standardized Ratio <sup>1</sup>
<b>United States</b>	<b>81.2%</b>	<b>85.9%</b>	<b>82.9%</b>	<b>90.2%</b>	<b>71.6%</b>	<b>81.2%</b>
Alaska	79.8%	85.3%	83.0%	88.2%	65.9%	79.2%
Alabama	85.5%	88.1%	85.7%	90.3%	77.1%	84.2%
Arkansas	86.1%	87.3%	88.1%	89.1%	73.6%	84.2%
Arizona	85.6%	91.6%	87.6%	91.7%	80.2%	86.5%
California	77.7%	88.3%	79.7%	92.6%	70.4%	79.8%
Colorado**	74.4%	85.5%	73.5%	88.9%	60.8%	73.3%
Connecticut	84.1%	83.8%	88.0%	90.4%	78.2%	85.3%
District of Columbia*	77.2%	84.3%	88.6%	90.1%	56.2%	79.6%
Delaware	81.8%	86.4%	84.7%	90.4%	76.3%	83.4%
Florida	76.4%	85.1%	79.7%	87.2%	55.0%	74.5%
Georgia	77.9%	84.9%	78.7%	89.6%	58.7%	75.4%
Hawaii*	85.6%	86.6%	89.7%	89.6%	78.9%	86.4%
Iowa	80.2%	83.6%	82.0%	91.1%	71.7%	80.7%
Idaho**	76.9%	84.9%	76.4%	90.3%	57.3%	73.9%
Illinois	88.7%	86.8%	90.5%	93.3%	83.3%	88.6%
Indiana*	82.0%	82.5%	84.7%	88.5%	70.2%	81.1%
Kansas*	78.4%	82.6%	79.2%	87.5%	60.2%	75.5%
Kentucky	82.0%	85.1%	82.3%	90.4%	64.2%	78.7%
Louisiana*	88.2%	89.1%	91.3%	90.6%	75.5%	86.6%
Massachusetts*	83.5%	86.3%	83.2%	93.9%	79.2%	83.9%
Maryland*	83.1%	84.6%	85.4%	89.6%	74.3%	82.9%
Maine*	80.7%	84.5%	88.4%	65.7%	83.4%	83.2%
Michigan	83.0%	83.4%	86.2%	89.4%	73.1%	82.8%
Minnesota*	78.0%	71.2%	80.8%	89.5%	69.9%	78.3%
Missouri**	80.7%	80.6%	83.4%	84.5%	67.4%	78.9%
Mississippi	83.0%	85.5%	82.0%	91.8%	71.6%	80.9%
Montana	79.1%	83.1%	80.1%	86.9%	64.9%	77.2%
North Carolina*	80.9%	87.3%	82.8%	90.9%	64.4%	79.7%
North Dakota*	77.0%	82.0%	79.0%	87.7%	62.3%	76.5%
Nebraska	79.9%	72.4%	83.1%	88.6%	62.7%	77.4%
New Hampshire*	80.0%	81.9%	82.0%	84.7%	64.7%	77.6%
New Jersey*	85.3%	87.6%	86.6%	92.4%	75.2%	84.4%
New Mexico	85.5%	86.0%	86.6%	90.4%	80.8%	85.5%
Nevada*	74.8%	84.3%	76.0%	85.1%	60.7%	73.8%
New York*	84.0%	86.8%	85.1%	93.0%	79.1%	84.7%
Ohio*	85.0%	84.0%	86.6%	88.7%	78.9%	84.5%
Oklahoma*	80.1%	85.5%	84.0%	88.3%	61.3%	78.5%
Oregon	80.1%	84.8%	79.7%	90.3%	74.3%	80.2%
Pennsylvania*	83.8%	84.5%	84.8%	90.4%	73.3%	82.4%
Rhode Island	86.9%	88.3%	87.4%	93.2%	81.0%	86.6%
South Carolina	84.6%	86.7%	86.5%	91.3%	74.1%	83.8%
South Dakota	80.5%	83.0%	82.6%	89.1%	63.5%	78.4%
Tennessee	85.7%	84.1%	88.0%	90.7%	75.6%	84.7%
Texas*	76.2%	88.8%	76.9%	90.3%	51.4%	72.9%
Utah**	68.0%	79.4%	68.5%	84.4%	57.8%	68.8%
Virginia	81.6%	85.7%	83.0%	88.8%	66.7%	79.6%
Vermont*	81.7%	88.0%	85.6%	90.3%	74.2%	83.4%
Washington*	81.2%	84.0%	85.0%	86.6%	66.8%	80.1%
Wisconsin**	79.4%	86.3%	80.2%	92.0%	70.8%	79.9%
West Virginia	80.8%	84.5%	81.0%	89.1%	62.0%	77.2%
Wyoming	77.3%	82.4%	78.2%	86.6%	63.2%	75.7%

Source: GW analysis of Medicaid Statistical Information System Datamart for FY2010/11, except where noted.

<sup>1</sup>Excludes data for Unknowns and non-eligibles

\*Data from 2010

\*\*Data from 2009

## Improving Medicaid's Continuity

The improvements in continuity of Medicaid coverage that have occurred since 2006 demonstrate that it is possible to reduce churning and increase the security of health insurance protections for low-income Medicaid beneficiaries. But more could be done. Understanding the types of changes that could be made requires knowing a little more about Medicaid administrative procedures, however.

State Medicaid programs have different options that can affect the continuity of Medicaid coverage. States may offer certification periods of varying length, up to 12 months at most. Beneficiaries must reapply (or renew their coverage), so their eligibility can be re-evaluated at least annually. Those who fail to reapply in time are dropped from coverage. They may reapply again at a later time, but it may take time before their Medicaid application is approved. During the certification period, beneficiaries must usually report any changes in their income, family composition, residence or other circumstances and are often required to submit periodic (e.g., quarterly) reports. If they fail to submit the periodic reports properly, they may be dropped from Medicaid. Under the ACA, children and non-elderly adults enrolled under the new expansion eligibility option will have a 12 month certification period, but may still lose coverage during that period if their income or other factors change during the year or if they fail to report a change in circumstances.

A special state option exists for children in Medicaid: 12 month continuous eligibility, under which they can remain covered for 12 months even if their family's income fluctuates. During this time, there is also no need to file periodic reports. After 12 months, they must again apply to renew their Medicaid coverage and eligibility is reevaluated. This is similar to how employer-sponsored insurance coverage and low-income subsidies for Medicare Part D work. States may also offer continuous eligibility for pregnant women, which covers them up to 60 days after childbirth.

However, there is no comparable statutory option for 12 months continuous eligibility in Medicaid for other populations. The Medicaid and CHIP Payment and Access Commission recently recommended that states have the option to provide 12 months continuous eligibility for non-elderly adults.<sup>7</sup> Recent analyses of the effect of adopting a 12 month continuous eligibility policy for children indicate that, as expected, this promotes better continuity of children's coverage in Medicaid, even after controlling for other economic and policy factors.<sup>8</sup> Adopting continuous eligibility policies in Medicaid could promote better continuity of coverage in a cost-effective fashion.

States also have other opportunities to improve the continuity of Medicaid coverage. The most important is to expand Medicaid income eligibility guidelines (as well as eliminating asset tests, which will occur as of January 1, 2014 for most Medicaid populations as a result of the ACA). With an expanded range of eligibility, minor fluctuations in earnings (or assets) are less likely to trigger an end to eligibility. The ACA already lets states undertake an expansion like

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<sup>7</sup> Medicaid and CHIP Payment and Access Commission, *Report to the Congress on Medicaid and CHIP*. March 2013.

<sup>8</sup> Ku, L., Steinmetz, E. and Bruen, B., forthcoming.

this and, until the Supreme Court made Medicaid expansions optional, all states were expected to adopt expanded Medicaid eligibility for adults. States that choose to expand Medicaid eligibility should experience improvements in continuity for individuals with lower incomes because it will take a larger income change to trigger a termination and because the ACA prohibits certification periods of less than 12 months unless information suggests that eligibility needs to be reviewed earlier. A key reason that continuity of enrollment is currently the weakest for Medicaid adults is that adults typically have the tightest income eligibility limits. (Currently, before any expansions, most states do not cover childless adults – those without dependent children – and the typical state’s Medicaid eligibility level for parents is about 61 percent of the poverty line.<sup>9</sup>)

There are also a variety of procedural steps that states could adopt to simplify renewal procedures too. For example, ensuring that there are readily available methods to renew coverage by mail, telephone or the internet reduces barriers. Simplifying application or renewal procedures by, for example, allowing people to self-attest to income and other circumstances can also help. (States may use other automated data sources to verify income without requiring people to find and bring in their paperwork.) CHIPRA encouraged states to adopt steps like these to simplify enrollment and renewal for children, but comparable procedures could help adults too, although they are probably not as effective as the implementation of 12 month continuous eligibility.

While this report has focused on churning for Medicaid beneficiaries, it is worth noting that churning can occur outside of Medicaid as well. Benjamin Sommers and Sara Rosenbaum have found that, after the ACA is implemented, churning could occur in transitions between eligibility for Medicaid and for the health insurance exchanges and federal tax credits. About half of all adults with incomes under 200 percent of the poverty line – 28 million people – will experience income changes that could require them to change coverage between Medicaid and the Exchanges within a one-year period.<sup>10</sup> While the ACA has policies that promote integrated “one-stop” enrollment and renewal procedures for Medicaid and the exchanges, delays in processing or misunderstandings could create insurance gaps if someone loses Medicaid but is not immediately enrolled in an exchange plan or vice versa. Moreover, even if insurance coverage is maintained, people may experience difficulties if they have to change insurance carriers or primary care physicians. Twelve month continuous eligibility in Medicaid could help reduce these problems by permitting a buffer period, during which people maintain Medicaid coverage until their exchange plan has been established. Since Medicaid is less costly than private insurance, this is also a cost-effective option.<sup>11</sup> The risks of churning will be much larger in states that fail to expand Medicaid because there may be a large gap between the income limits at which adults are eligible for Medicaid and eligibility for health insurance exchanges if they fail to expand Medicaid.

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<sup>9</sup> Heberlein, *op cit*.

<sup>10</sup> Sommers B, Rosenbaum S. Issues in Health Reform: How Changes in Eligibility May Move Millions Back and Forth between Medicaid and Insurance Exchanges. *Health Affairs* 2011 Feb; 30(2): 228-236.

<sup>11</sup> Ku L, Broaddus M. “Public and Private Health Insurance: Stacking Up the Costs,” *Health Affairs*, 2008 Jun, 27(4):w318-327.



## **Appendix A**

Table A-1: Overall Unadjusted Enrollment Continuity Ratios for State Medicaid Programs,  
FY2006-11

Table A-2: Enrollment Continuity Ratios for State Medicaid Programs for the Aged, FY2006-11

Table A-3: Enrollment Continuity Ratios for State Medicaid Programs for Children, FY2006-11

Table A-4: Enrollment Continuity Ratios for State Medicaid Programs for the Blind and  
Disabled, FY2006-11

Table A-5: Enrollment Continuity Ratios for State Medicaid Programs for Non-elderly Adults,  
FY2006-11

Table A-1: Overall Unadjusted Continuity Ratios for State Medicaid Programs, FY2006-11

	Overall Unadjusted Continuity Ratios (Includes Unknowns)					
	2006	2007	2008	2009	2010	2011
Alaska	75.8%	75.2%	76.4%	76.8%	79.8%	79.8%
Alabama	81.0%	79.8%	82.7%	83.1%	83.3%	85.5%
Arkansas	83.0%	82.3%	82.0%	84.2%	84.5%	86.1%
Arizona	74.0%	74.6%	74.9%	74.4%	85.6%	85.6%
California	75.7%	76.0%	76.3%	77.0%	77.9%	77.7%
Colorado	76.1%	72.9%	73.2%	74.4%		
Connecticut	83.5%	83.7%	84.6%	84.6%	80.2%	84.1%
District of Columbia	86.3%	85.4%	85.1%	86.2%	77.2%	
Delaware	79.0%	77.6%	78.2%	78.4%	80.2%	81.8%
Florida	74.1%	74.8%	73.8%	75.6%	76.2%	76.4%
Georgia	74.6%	74.0%	75.0%	75.9%	77.9%	77.9%
Hawaii	83.9%	82.5%	83.0%	82.1%	85.6%	
Iowa	75.8%	76.6%	78.2%	79.2%	79.9%	80.2%
Idaho	78.8%	81.5%	78.2%	76.9%		
Illinois	77.9%	83.2%	83.9%	86.2%	87.8%	88.7%
Indiana	79.1%	79.9%	79.0%	81.9%	82.0%	
Kansas	76.0%	75.1%	75.8%	75.6%	78.4%	
Kentucky	80.8%	81.5%	81.0%	81.8%	82.3%	82.0%
Louisiana	86.1%	82.7%	86.8%	87.1%	88.2%	
Massachusetts	82.3%	81.6%	83.5%	82.5%	83.5%	
Maryland	81.1%	80.9%	81.1%	82.5%	83.1%	
Maine	83.3%	83.3%	85.3%	85.4%	80.7%	
Michigan	80.1%	82.3%	81.3%	81.4%	82.5%	83.0%
Minnesota	76.0%	76.0%	76.3%	76.2%	78.0%	
Missouri	79.7%	82.1%	81.6%	80.7%		
Mississippi	80.8%	80.0%	82.3%	81.7%	82.4%	83.0%
Montana	74.0%	73.7%	74.1%	73.5%	77.7%	79.1%
North Carolina	78.3%	79.1%	79.4%	79.8%	80.9%	
North Dakota	71.8%	73.6%	74.1%	77.0%	77.0%	
Nebraska	78.4%	79.0%	79.1%	79.1%	80.6%	81.1%
New Hampshire	78.0%	77.9%	78.3%	78.6%	80.0%	
New Jersey	83.5%	84.3%	84.1%	84.4%	85.3%	
New Mexico	78.5%	80.8%	82.9%	81.9%	85.3%	85.5%
Nevada	70.0%	69.9%	71.7%	72.2%	74.8%	
New York	81.4%	81.7%	82.4%	83.8%	84.0%	
Ohio	81.5%	81.1%	81.6%	82.3%	85.0%	
Oklahoma	77.2%	79.0%	76.8%	77.4%	80.1%	
Oregon	74.9%	74.0%	74.8%	76.5%	77.0%	80.1%
Pennsylvania	82.1%	81.6%	81.3%	82.9%	83.8%	
Rhode Island	84.6%	84.4%	83.9%	82.8%	83.9%	86.9%
South Carolina	81.0%	80.8%	82.5%	82.2%	83.4%	84.6%
South Dakota	80.3%	79.1%	79.1%	79.1%	79.8%	80.5%
Tennessee	84.8%	85.7%	84.9%	84.9%	85.7%	85.7%
Texas	73.5%	74.0%	74.8%	75.0%	76.2%	
Utah	68.0%	67.3%	67.6%	68.0%		
Virginia	82.0%	81.2%	81.5%	81.4%	81.8%	81.6%
Vermont	79.1%	79.5%	80.0%	80.6%	81.7%	
Washington	79.4%	79.2%	79.7%	84.6%	81.2%	
Wisconsin	80.5%	80.4%	79.4%	79.4%		
West Virginia	80.1%	80.4%	80.6%	80.3%	81.1%	80.8%
Wyoming	75.5%	75.1%	74.8%	75.1%	77.1%	77.3%
United States	78.5%	78.9%	79.2%	79.9%	81.2%	80.9%
United States (2010 Grouping)	78.5%	78.9%	79.3%	80.1%	81.2%	N/A

Source: GW analysis of Medicaid Statistical Information System Datamart for FY2006-11.

Table A-2: Continuity Ratios for State Medicaid Programs for the Aged, FY2006-11

	Aged					
	2006	2007	2008	2009	2010	2011
Alaska	86.8%	86.5%	88.0%	87.6%	86.5%	85.3%
Alabama	87.6%	88.4%	87.9%	88.7%	88.4%	88.1%
Arkansas	86.0%	83.7%	85.8%	86.8%	86.3%	87.3%
Arizona	78.0%	83.2%	83.0%	84.5%	91.7%	91.6%
California	87.1%	87.8%	88.1%	88.3%	88.4%	88.3%
Colorado	85.2%	83.8%	84.3%	85.5%		
Connecticut	86.3%	85.6%	85.8%	86.0%	78.1%	83.8%
District of Columbia	85.1%	87.2%	85.3%	85.3%	84.3%	
Delaware	86.3%	87.7%	88.0%	87.9%	86.9%	86.4%
Florida	83.3%	84.8%	82.1%	84.6%	84.9%	85.1%
Georgia	84.2%	85.6%	85.6%	85.3%	86.4%	84.9%
Hawaii	85.8%	85.5%	85.5%	85.0%	86.6%	
Iowa	83.2%	83.5%	83.4%	84.2%	83.4%	83.6%
Idaho	83.5%	85.0%	84.9%	84.9%		
Illinois	50.2%	79.9%	82.1%	83.9%	85.1%	86.8%
Indiana	81.8%	83.0%	82.2%	84.4%	82.5%	
Kansas	81.9%	81.8%	82.3%	83.0%	82.6%	
Kentucky	84.2%	84.8%	84.6%	85.6%	85.6%	85.1%
Louisiana	87.3%	86.0%	88.8%	88.2%	89.1%	
Massachusetts	85.7%	85.5%	85.3%	84.8%	86.3%	
Maryland	78.5%	84.0%	84.6%	86.0%	84.6%	
Maine	81.0%	77.1%	87.9%	88.4%	84.5%	
Michigan	83.4%	83.3%	83.9%	83.5%	83.0%	83.4%
Minnesota	72.3%	71.4%	71.3%	71.2%	71.2%	
Missouri	81.3%	82.8%	82.6%	80.6%		
Mississippi	89.6%	88.2%	89.0%	89.5%	87.9%	85.5%
Montana	73.9%	76.2%	77.4%	76.4%	80.0%	83.1%
North Carolina	86.7%	87.3%	87.4%	87.5%	87.3%	
North Dakota	80.5%	83.1%	82.6%	82.6%	82.0%	
Nebraska	83.8%	83.8%	83.6%	84.0%	72.2%	72.4%
New Hampshire	80.9%	80.4%	81.1%	81.4%	81.9%	
New Jersey	86.9%	87.5%	87.1%	87.7%	87.6%	
New Mexico	85.1%	85.7%	85.4%	85.6%	86.7%	86.0%
Nevada	82.2%	83.5%	83.5%	83.8%	84.3%	
New York	84.0%	84.3%	84.7%	86.9%	86.8%	
Ohio	82.5%	83.1%	82.9%	83.5%	84.0%	
Oklahoma	84.5%	85.8%	84.8%	85.0%	85.5%	
Oregon	83.7%	84.5%	84.6%	85.0%	84.7%	84.8%
Pennsylvania	84.1%	84.4%	84.2%	84.6%	84.5%	
Rhode Island	84.6%	85.2%	84.0%	86.1%	82.0%	88.3%
South Carolina	64.6%	88.3%	86.6%	87.2%	87.3%	86.7%
South Dakota	84.7%	83.6%	84.2%	84.0%	82.5%	83.0%
Tennessee	82.2%	85.5%	85.1%	83.2%	84.1%	84.1%
Texas	89.0%	89.3%	89.3%	89.1%	88.8%	
Utah	79.6%	80.6%	80.4%	79.4%		
Virginia	86.1%	86.3%	86.6%	86.8%	86.0%	85.7%
Vermont	84.5%	85.4%	86.5%	86.2%	88.0%	
Washington	82.9%	84.2%	84.0%	87.8%	84.0%	
Wisconsin	84.5%	86.8%	86.9%	86.3%		
West Virginia	81.8%	85.3%	85.2%	84.8%	80.2%	84.5%
Wyoming	82.0%	82.0%	82.3%	82.1%	81.5%	82.4%
United States	82.2%	85.3%	85.4%	86.0%	85.9%	86.3%
46 States Reporting in 2010	82.2%	85.3%	85.4%	86.1%	85.9%	N/A

Source: GW analysis of Medicaid Statistical Information System Datamart for FY2006-11.

Table A-3: Continuity Ratios for State Medicaid Programs for Children, FY2006-11

	Children					
	2006	2007	2008	2009	2010	2011
Alaska	77.9%	77.2%	78.0%	78.6%	83.5%	83.0%
Alabama	80.1%	77.8%	81.2%	81.7%	83.1%	85.7%
Arkansas	85.8%	84.5%	83.2%	85.6%	86.5%	88.1%
Arizona	76.0%	75.9%	76.3%	76.7%	87.8%	87.6%
California	76.8%	77.0%	77.5%	78.7%	80.4%	79.7%
Colorado	75.5%	71.7%	71.8%	73.5%		
Connecticut	83.6%	84.2%	85.2%	85.1%	87.5%	88.0%
District of Columbia	87.7%	87.2%	86.5%	88.4%	88.6%	
Delaware	80.3%	78.2%	79.3%	80.0%	82.7%	84.7%
Florida	75.1%	74.5%	73.6%	75.9%	79.3%	79.7%
Georgia	74.7%	73.1%	74.7%	76.5%	78.8%	78.7%
Hawaii	88.4%	86.6%	88.0%	86.3%	89.7%	
Iowa	77.2%	77.0%	78.4%	81.0%	81.9%	82.0%
Idaho	80.4%	83.6%	78.3%	76.4%		
Illinois	84.4%	86.4%	87.5%	87.8%	89.6%	90.5%
Indiana	80.8%	81.5%	81.8%	83.9%	84.7%	
Kansas	76.6%	74.9%	75.3%	75.0%	79.2%	
Kentucky	80.7%	81.4%	80.6%	81.8%	82.8%	82.3%
Louisiana	89.0%	84.8%	88.8%	89.9%	91.3%	
Massachusetts	82.5%	83.7%	84.3%	82.8%	83.2%	
Maryland	82.7%	81.4%	82.9%	84.1%	85.4%	
Maine	85.7%	86.2%	85.2%	85.0%	88.4%	
Michigan	83.5%	84.3%	83.6%	85.1%	86.4%	86.2%
Minnesota	77.8%	78.2%	78.7%	79.0%	80.8%	
Missouri	82.5%	84.2%	83.4%	83.4%		
Mississippi	76.6%	75.5%	78.9%	80.1%	81.5%	82.0%
Montana	75.1%	74.4%	74.4%	73.9%	77.8%	80.1%
North Carolina	79.1%	80.0%	80.4%	81.2%	82.8%	
North Dakota	70.3%	71.4%	72.5%	78.7%	79.0%	
Nebraska	79.2%	79.8%	80.0%	80.1%	82.9%	83.1%
New Hampshire	78.9%	79.1%	79.4%	80.2%	82.0%	
New Jersey	84.3%	85.0%	84.8%	85.3%	86.6%	
New Mexico	78.8%	82.1%	85.0%	84.5%	86.6%	86.6%
Nevada	69.6%	69.1%	71.7%	72.6%	76.0%	
New York	82.1%	82.7%	83.4%	84.3%	85.1%	
Ohio	84.2%	83.3%	83.7%	84.9%	86.6%	
Oklahoma	78.8%	82.3%	79.7%	80.6%	84.0%	
Oregon	72.1%	70.6%	72.3%	74.0%	78.5%	79.7%
Pennsylvania	81.9%	80.3%	81.4%	83.3%	84.8%	
Rhode Island	83.7%	83.5%	83.5%	83.7%	84.7%	87.4%
South Carolina	83.7%	81.3%	82.7%	83.2%	85.0%	86.5%
South Dakota	81.3%	79.7%	79.7%	80.0%	81.4%	82.6%
Tennessee	85.4%	85.1%	85.2%	85.9%	88.4%	88.0%
Texas	73.7%	74.3%	74.7%	75.0%	76.9%	
Utah	68.3%	67.6%	67.3%	68.5%		
Virginia	81.9%	80.8%	81.4%	82.1%	83.2%	83.0%
Vermont	82.7%	82.6%	83.5%	84.5%	85.6%	
Washington	82.6%	82.0%	82.3%	87.1%	85.0%	
Wisconsin	80.2%	79.6%	75.9%	80.2%		
West Virginia	80.9%	80.5%	80.8%	80.3%	81.6%	81.0%
Wyoming	76.3%	75.6%	75.2%	75.8%	78.5%	78.2%
United States	79.6%	79.6%	80.1%	81.1%	83.1%	83.1%
46 States Reporting in 2010	79.7%	79.7%	80.3%	81.3%	83.1%	N/A

Source: GW analysis of Medicaid Statistical Information System Datamart for FY2006-11.

Table A-4: Continuity Ratios for State Medicaid Programs for the Blind and Disabled, FY2006-11

	Blind/Disabled					2011
	2006	2007	2008	2009	2010	
Alaska	89.6%	88.8%	90.3%	90.0%	88.5%	88.2%
Alabama	89.7%	90.5%	90.3%	89.8%	89.6%	90.3%
Arkansas	86.4%	86.0%	86.7%	87.9%	87.9%	89.1%
Arizona	88.9%	90.8%	91.2%	89.5%	94.0%	91.7%
California	92.0%	92.9%	92.9%	93.3%	93.3%	92.6%
Colorado	88.6%	84.8%	88.5%	88.9%		
Connecticut	89.7%	89.7%	90.1%	89.9%	89.4%	90.4%
District of Columbia	87.6%	86.6%	86.8%	86.9%	90.1%	
Delaware	90.0%	90.0%	90.1%	89.9%	90.4%	90.4%
Florida	87.8%	89.0%	85.3%	87.5%	88.1%	87.2%
Georgia	88.4%	89.5%	89.5%	87.7%	90.3%	89.6%
Hawaii	87.2%	87.7%	88.6%	88.5%	89.6%	
Iowa	91.0%	91.3%	92.0%	91.5%	90.9%	91.1%
Idaho	88.9%	89.9%	90.4%	90.3%		
Illinois	90.7%	92.6%	92.5%	91.4%	91.9%	93.3%
Indiana	88.5%	89.9%	89.3%	90.6%	88.5%	
Kansas	87.6%	87.1%	88.2%	88.0%	87.5%	
Kentucky	90.0%	90.8%	90.8%	90.6%	90.7%	90.4%
Louisiana	87.6%	89.4%	90.9%	89.6%	90.6%	
Massachusetts	91.6%	78.8%	84.5%	93.8%	93.9%	
Maryland	88.3%	89.1%	89.3%	91.7%	89.6%	
Maine	90.9%	89.6%	91.9%	91.6%	65.7%	
Michigan	90.2%	90.3%	89.7%	87.7%	88.5%	89.4%
Minnesota	89.0%	90.1%	90.5%	89.7%	89.5%	
Missouri	83.5%	86.3%	87.2%	84.5%		
Mississippi	91.3%	90.4%	90.8%	91.2%	89.4%	91.8%
Montana	81.9%	83.5%	84.0%	83.7%	87.3%	86.9%
North Carolina	89.2%	91.0%	91.0%	90.8%	90.9%	
North Dakota	85.8%	87.7%	88.0%	88.4%	87.7%	
Nebraska	89.3%	89.8%	89.5%	89.3%	87.8%	88.6%
New Hampshire	85.0%	84.1%	85.6%	84.3%	84.7%	
New Jersey	92.5%	92.6%	92.7%	92.6%	92.4%	
New Mexico	90.2%	91.0%	90.2%	89.9%	89.8%	90.4%
Nevada	82.5%	83.0%	83.3%	83.8%	85.1%	
New York	91.6%	92.5%	92.3%	93.2%	93.0%	
Ohio	86.9%	87.2%	88.3%	88.8%	88.7%	
Oklahoma	87.7%	87.2%	88.0%	87.3%	88.3%	
Oregon	88.1%	88.4%	89.2%	89.3%	90.2%	90.3%
Pennsylvania	89.7%	90.1%	89.6%	90.1%	90.4%	
Rhode Island	93.2%	92.4%	91.4%	93.0%	92.0%	93.2%
South Carolina	91.9%	91.6%	92.7%	91.4%	91.2%	91.3%
South Dakota	90.2%	90.2%	90.2%	89.9%	88.9%	89.1%
Tennessee	94.0%	95.0%	93.7%	93.3%	88.7%	90.7%
Texas	89.8%	90.1%	90.3%	90.4%	90.3%	
Utah	85.2%	85.3%	84.3%	84.4%		
Virginia	90.3%	89.8%	90.3%	90.0%	88.8%	88.8%
Vermont	89.4%	89.3%	89.6%	90.5%	90.3%	
Washington	86.7%	86.9%	86.9%	89.7%	86.6%	
Wisconsin	91.0%	91.0%	91.8%	92.0%		
West Virginia	89.3%	89.7%	89.6%	88.8%	90.7%	89.1%
Wyoming	87.0%	87.4%	87.2%	86.2%	86.8%	86.6%
United States	89.8%	89.9%	90.0%	90.5%	90.3%	90.6%
46 States Reporting in 2010	90.0%	90.1%	90.1%	90.6%	90.3%	N/A

Source: GW analysis of Medicaid Statistical Information System Datamart for FY2006-11.

Table A-5: Continuity Ratios for State Medicaid Programs for Non-elderly Adults, FY2006-11

	Non-elderly Adult					
	2006	2007	2008	2009	2010	2011
Alaska	60.2%	58.5%	60.6%	61.8%	64.0%	65.9%
Alabama	71.0%	65.6%	72.3%	74.6%	72.8%	77.1%
Arkansas	72.8%	71.7%	70.9%	72.7%	71.6%	73.6%
Arizona	67.9%	67.9%	68.4%	67.4%	80.3%	80.2%
California	68.6%	68.7%	68.8%	69.3%	70.0%	70.4%
Colorado	63.4%	61.0%	59.1%	60.8%		
Connecticut	78.1%	78.0%	80.0%	80.2%	68.7%	78.2%
District of Columbia	82.8%	80.4%	80.9%	81.5%	56.2%	
Delaware	72.9%	71.1%	71.5%	71.8%	73.9%	76.3%
Florida	53.0%	54.6%	57.8%	58.6%	54.1%	55.0%
Georgia	57.6%	56.3%	56.8%	57.2%	57.8%	58.7%
Hawaii	75.5%	73.4%	73.3%	73.8%	78.9%	
Iowa	61.9%	65.6%	68.8%	68.7%	70.2%	71.7%
Idaho	59.5%	58.7%	56.9%	57.3%		
Illinois	70.2%	69.2%	69.0%	80.5%	82.5%	83.3%
Indiana	65.2%	65.6%	62.3%	70.0%	70.2%	
Kansas	59.4%	57.4%	56.9%	56.3%	60.2%	
Kentucky	63.5%	63.9%	63.1%	63.9%	64.1%	64.2%
Louisiana	69.5%	63.6%	73.9%	74.4%	75.5%	
Massachusetts	74.7%	80.3%	80.6%	77.6%	79.2%	
Maryland	72.4%	71.5%	68.5%	72.0%	74.3%	
Maine	77.5%	79.8%	80.3%	80.6%	83.4%	
Michigan	65.0%	72.2%	70.2%	69.3%	71.1%	73.1%
Minnesota	66.1%	65.7%	65.8%	66.1%	69.9%	
Missouri	68.0%	70.9%	69.5%	67.4%		
Mississippi	74.6%	74.1%	76.6%	68.7%	70.8%	71.6%
Montana	64.5%	62.2%	62.2%	61.3%	65.6%	64.9%
North Carolina	61.3%	61.5%	62.0%	63.0%	64.4%	
North Dakota	60.9%	63.0%	63.0%	61.2%	62.3%	
Nebraska	63.9%	64.7%	64.5%	64.0%	63.7%	62.7%
New Hampshire	64.5%	64.0%	63.2%	63.1%	64.7%	
New Jersey	70.4%	72.6%	73.2%	73.5%	75.2%	
New Mexico	70.5%	70.6%	73.9%	72.1%	80.0%	80.8%
Nevada	56.2%	55.6%	57.1%	57.2%	60.7%	
New York	76.0%	75.6%	76.6%	78.7%	79.1%	
Ohio	71.3%	70.7%	71.7%	71.9%	78.9%	
Oklahoma	59.1%	57.2%	54.0%	56.5%	61.3%	
Oregon	69.0%	66.7%	65.8%	69.7%	63.6%	74.3%
Pennsylvania	72.1%	71.8%	68.9%	72.6%	73.3%	
Rhode Island	79.6%	79.5%	78.6%	73.9%	77.4%	81.0%
South Carolina	77.2%	69.7%	72.5%	71.0%	72.1%	74.1%
South Dakota	65.4%	64.0%	63.9%	62.8%	63.8%	63.5%
Tennessee	73.9%	76.5%	73.5%	72.9%	76.0%	75.6%
Texas	45.4%	45.7%	50.3%	50.1%	51.4%	
Utah	58.3%	56.2%	57.9%	57.8%		
Virginia	70.1%	68.4%	68.1%	66.0%	66.7%	66.7%
Vermont	68.3%	69.4%	70.6%	72.4%	74.2%	
Washington	68.3%	67.0%	66.7%	72.6%	66.8%	
Wisconsin	73.7%	73.2%	75.6%	70.8%		
West Virginia	59.6%	59.4%	60.0%	61.0%	62.3%	62.0%
Wyoming	60.5%	59.3%	58.8%	58.6%	61.7%	63.2%
United States	68.3%	68.3%	68.8%	69.9%	71.3%	71.2%
46 States Reporting in 2010	68.3%	68.3%	68.8%	70.1%	71.3%	N/A

Source: GW analysis of Medicaid Statistical Information System Datamart for FY2006-11.