ISSUE BRIEF
November 2011

Using Data to Drive State Improvement in Enrollment and Retention Performance

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ABSTRACT

The *Maximizing Enrollment* program has worked intensively with eight states to help them increase their use of Medicaid and CHIP enrollment and retention data to monitor and improve performance in enrolling and retaining eligible individuals. From this work, *Maximizing Enrollment* and Mathematica Policy Research, Inc., have developed a set of 12 core performance measures for enrollment and retention that states can use to monitor how long individuals stay covered once they are enrolled, track the results of eligibility-related policy changes, determine trends in program performance, and track progress as they implement changes in eligibility and retention policies under the Affordable Care Act.

Collecting, analyzing, and using data to monitor enrollment and retention can be a powerful tool to help states assess performance in administering public and publicly-subsidized insurance affordability programs like Medicaid, the Children's Health Insurance Program (CHIP), the Basic Health Program, and state health insurance exchanges.[1] *Maximizing Enrollment*, a national program of the Robert Wood Johnson Foundation, has been working with eight states since early 2009 to assist their efforts in effectively using enrollment and retention data to improve coverage for eligible individuals.[2] The lessons learned by these states can help other states and federal policymakers as they think about performance measurement in implementation of new eligibility systems and enrollment initiatives, including those in the Affordable Care Act (ACA).

This brief shares specific recommendations for performance measures to monitor enrollment in insurance affordability programs derived from this early experience with the *Maximizing Enrollment* program. The recommendations include a definition of how the measures can be constructed and examples from state experience on their potential value. These recommendations were developed by Mathematica Policy Research, Inc., which is evaluating the *Maximizing Enrollment* program for the Robert Wood Johnson Foundation.

The brief provides a set of 12 core measures that states may want to consider implementing as they plan for new eligibility and enrollment rules and systems governing insurance affordability programs. States can use these measures to answer key questions about their program performance, including: What changes do we see over time in regard to how people enter and leave Medicaid, CHIP and other insurance programs? Did we expect to see those changes, based on the policies we have implemented? What are the patterns and trends we see from these data and what is causing them?

Robert Wood Johnson Foundation

Background

When the *Maximizing Enrollment* national program launched its work with grantee states in 2009, each of the eight states participated in a diagnostic assessment of factors affecting each state's performance in enrollment and retention of children in Medicaid and CHIP, including their capacity to collect, analyze, and utilize data for program management and improvement. From that work, *Maximizing Enrollment* states learned that in many cases they could not answer important questions about program performance, such as "how long do children remain covered once they enroll?" or "what percentage of applications for coverage are denied each month because of missing information?" The diagnostic assessments found that these data gaps hamper states' ability to drive enrollment policies to help eligible individuals obtain and keep health coverage.

The *Maximizing Enrollment* states are not unique in this respect. Many states find collecting and using data to monitor performance challenging for a number of reasons. First, most states face barriers to collecting eligibility system data. In many cases, state Medicaid or CHIP programs share these eligibility systems and state analytic resources with other programs, like the Supplemental Nutrition Assistance Program, Temporary Assistance to Needy Families, or the Low-Income Heating Assistance Program. Resource constraints and competition between programs can impair a state's ability to develop useful metrics and data reports. Even in cases where Medicaid or CHIP programs oversee or have ready access to eligibility system databases, producing regular data reports can be time-consuming and expensive, making their regular use challenging for cash-strapped states. Second, in states with separate Medicaid and CHIP programs, these eligibility systems are often separate, making it even harder for states to track children across programs as eligibility changes. Finally, states are often uncertain about what to measure and how. Given resource constraints, states want to be sure to get the "most bang for their buck," but may not know which measures they should pursue.

Despite these challenges, states recognize the importance of using data to monitor performance in enrollment and retention. It helps states with **assessment**, answering key questions like: "Is the state improving? What was the result of the policy or procedural change the state implemented? Did the state accomplish its goal?" Monitoring can also help states with critical **planning** work, helping the state to understand: "What should the state expect to result from a future policy/procedural change or external influence?" Performance measures also help states set goals for future performance, allowing the state to strategically move toward improvement and claim successes when **goals** are reached. Over the first two years of participation in *Maximizing Enrollment*, a number of grantee states have improved their capacity to use data to assess, plan or set goals for future performance in a meaningful way.

The availability of new federal support for eligibility system improvement and integration under the Affordable Care Act and implementing regulations provides a new impetus and opportunity for all states to think differently about how they collect and utilize data. This issue brief provides a set of suggested measures for states to consider as they develop new or improved systems and policies.

Measures

This brief recommends 12 core measures to support performance measurement for enrollment and retention systems. These measures are based in Mathematica's experience in evaluating data collected from the *Maximizing Enrollment* states, and represent sound, feasible measures for states to implement. All of these measures help states to answer questions about who is enrolled in programs over time, and how people enter and leave those programs. These measures fit well with enrollment reporting that states are already doing, such as the counts of CHIP enrollees reported through the CHIP Annual Reporting Template System (CARTS).

These measures vary in their ease of implementation – with those expected to be more difficult to implement also expected to be the most useful for assessing performance. States may therefore want to phase these measures in gradually. However, given the enhanced funding for eligibility system redesign made available by the Affordable Care Act, states may want to consider implementing the entire set of measures as they build new technology infrastructure.

For purposes of discussion in this brief, these measures are divided into three groups, progressing from the easiest to implement to the more challenging:

- **First Group**: These measures are relatively straightforward to develop and use, and they are likely already in use by some states.

- **Second Group**: These measures can offer a more refined assessment of performance enrolling and retaining individuals, but they are also more complex to construct (requiring states to link data over time or across multiple data elements or programs).

- **Third Group**: These measures can offer the best means of assessing performance, but they are again more complex to construct and require accurate data on reasons for disenrolling from (or not enrolling in) coverage.[3]

First Group: Core Measures of Enrollment and Disenrollment

Three measures serve as basic building blocks for assessing how many people are in a state's insurance affordability programs in a given month, and how many are moving into and out of them. They are readily producible in all states and, in some states, they are likely already being used to monitor program growth and, more rarely, to assess the impact of new policies or procedures.[4]

1. **Total enrollment**: the number of individuals with at least one day of coverage in a specific program (e.g., Medicaid or CHIP) in a given month.

2. **Total new enrollment**: the number of individuals entering a specific program in a given month.

3. **Total disenrollment**: the number of individuals exiting a specific program in a given month.

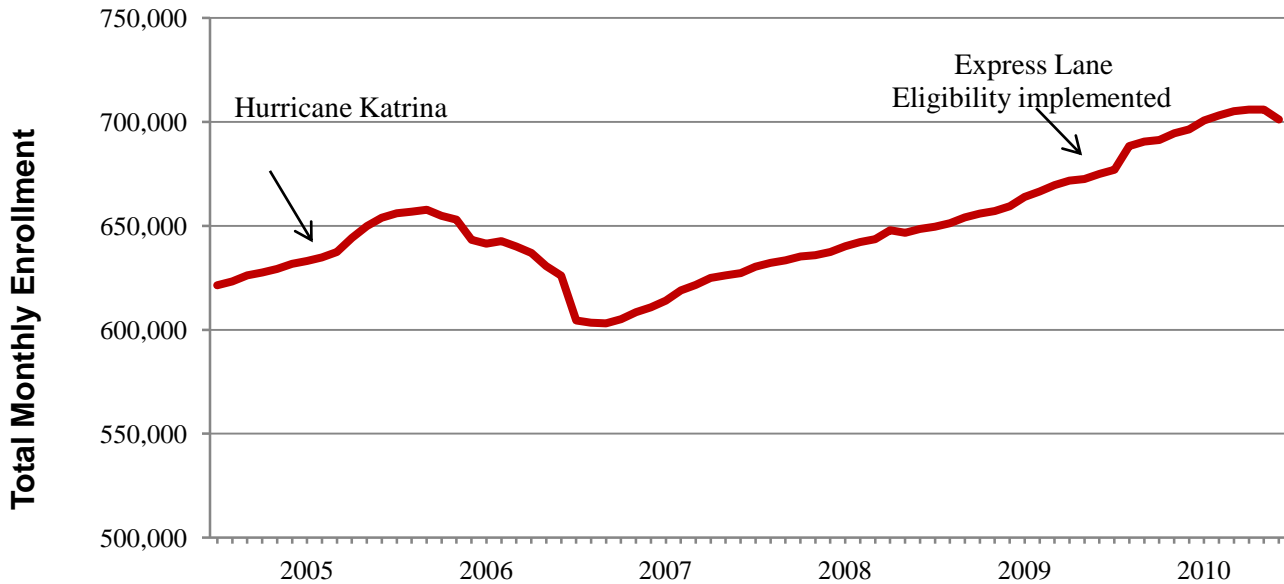| **First Group Measures** |
|---|
| **Total enrollment**: *How many people are enrolled in each insurance affordability program this month?* |
| **Total new enrollment:** *How many people are entering each insurance affordability program this month?* |
| **Total disenrollment**: *How many people are leaving each insurance affordability program this month?* |

By updating these measures each month, states can form a trend line for each measure over time. In turn, the measures can provide a means of identifying any notable shifts in coverage and their possible source(s). For example, across the *Maximizing Enrollment* states we have seen persistent gains in *total enrollment* since the start of the economic downturn. By looking at the measures of *total new enrollment* and *total disenrollment*, we can see that these gains are mainly the result of a downward trend in monthly disenrollments. This suggests that the ongoing growth in Medicaid and CHIP enrollment may stem largely from improved retention.

Also, these measures can identify significant shifts in coverage over a short period, which can often be linked to important state policy changes or to other external events. For example, in Louisiana (see Figure 1), total enrollment over the last several years has shown persistent gains, with only two exceptions to the trend. The first, evident from a pair of disenrollment spikes (in 2006 and early 2007), reflects the out-of-state relocation of tens of thousands of Medicaid children in the aftermath of Hurricane Katrina. The second, evident by a large spike in new

enrollment in early 2010, reflects the adoption of express lane eligibility, which added more than 15,000 children to the Medicaid rolls in its first month.

FIGURE 1: TOTAL MONTHLY ENROLLMENT, LOUISIANA, 2005-2010

Source: Mathematica analysis of Maximizing Enrollee grantee state data, 2011.

Second Group: Measures of Retention and Transitions Between Programs

Second-group measures allow states to better understand different aspects of retention, namely the duration of individuals in coverage and the extent to which they transfer between programs or "churn" back to the same program after disenrolling.

MEASURE OF DURATION (CONTINUOUS COVERAGE)

4. **Overall retention rate**: the proportion of new enrollees in a given month who remain continuously enrolled for different periods of time – e.g., six, 12 and 18 months.

This measure is essentially a simple ratio. The denominator of the ratio is the *total new enrollees* in a given month (what we call the "origin month"). And the numerator of the ratio is the number of these new enrollees that are still covered at various lengths of time from the origin month (for example, 6, 12 and 18 months.)

For example, to determine the retention measure at six months from January 2011, a state needs to examine the proportion of all the individuals who enrolled in Medicaid in January 2011 who are still enrolled as of July 2011 (a six-month period). In January 2012, the state can then calculate the 12-month retention rate for that cohort of enrollees. And, in July 2012, the state can calculate the 18-month retention rate. The formula is:

$$\text{Overall retention rate} = \frac{\text{Total new enrollees in origin month that are still covered (6, 12, or 18 months later)}}{\text{Total new enrollees in origin month}}$$

The three illustrative periods – six, 12, and 18 months – are useful because they bracket the first annual renewal, providing a clear indicator of how often individuals are disenrolling as a result of the renewal process.5 this information has been useful for the *Maximizing Enrollment* states, which have noted wide variation in their retention of children through the renewal process (see figure 2). Their experience may serve as a benchmark for what may be realistic for states to achieve. Looking ahead to enrollment of new eligibles, states may have a heightened interest in monitoring program disenrollments and transfers of coverage, given the likely churn of low-income populations.

FIGURE 2: PROPORTION OF NEW ENROLLEES RETAINED 18 MONTHS, MAXIMIZING ENROLLMENT STATES, 2007-2010
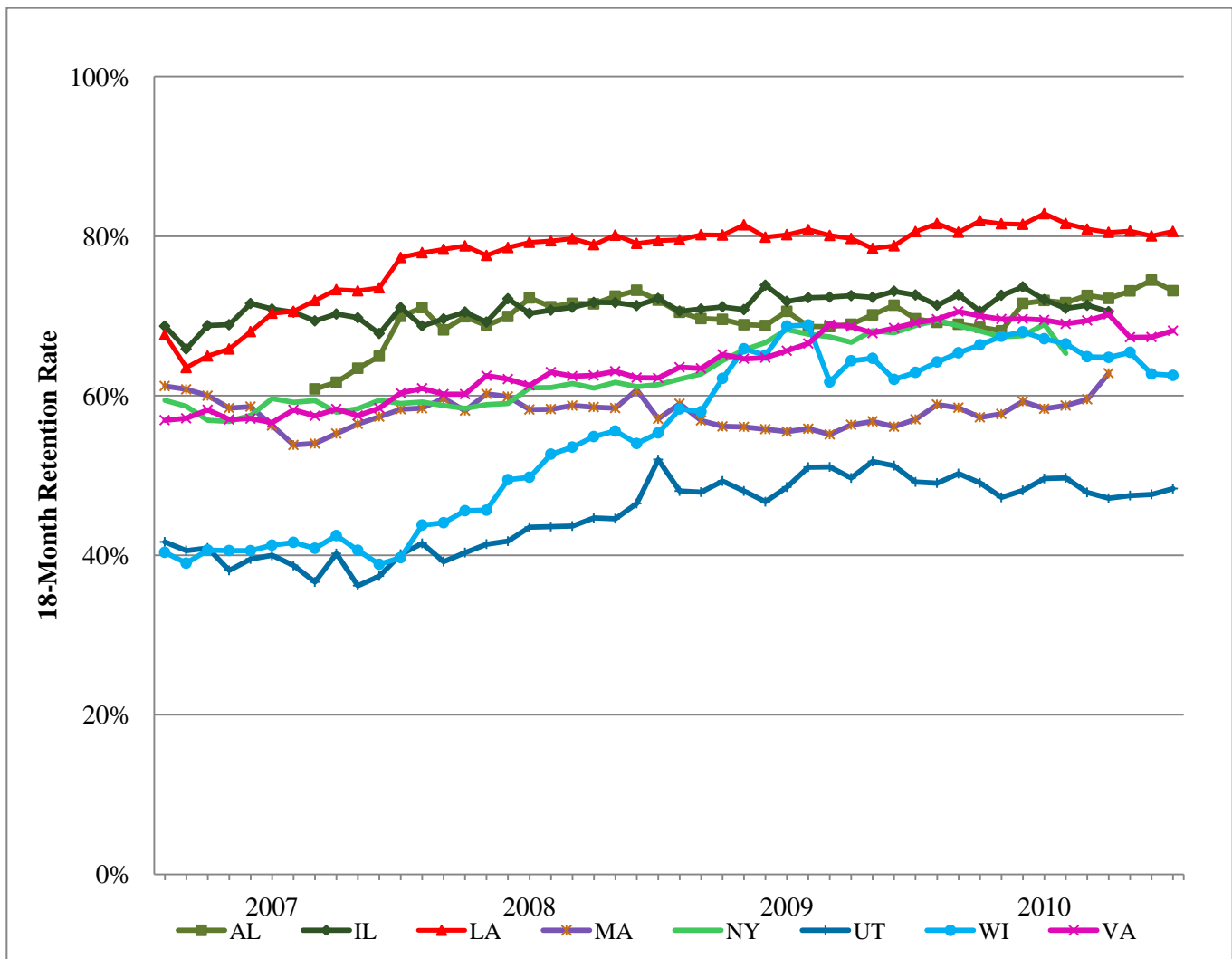
Source: Mathematica analysis of Maximizing Enrollee grantee state data, 2011.

MEASURES OF PROGRAM TRANSITIONS

The second group measures transitions into and out of individual state programs. They include measures of:

5. **Churn**, which equals the number of program disenrollees in a given month who later reenroll in the program following a gap in coverage of one to six months.

6. **Seamless transitions**, which equals the number of program disenrollees in a given month who transfer to a separately administered program (for example, Medicaid to a separate CHIP program) the following month.

7. **Non-seamless transitions**, which equals the number of program disenrollees in a given month who transfer to a separately administered program (for example, Medicaid to a separate CHIP program) following a gap in public coverage of one to six months.

8. **Long-term departures**, which equals the number of program disenrollees in a given month who remain without public coverage for more than six months.

9. **True entries**, which equals the number of program enrollees in a given month who did not have public coverage at any point in the previous six months.

These measures focus particularly on disruptions in coverage that can occur when individuals move between programs, and on the persistent challenge of *churning*, when individuals are disenrolled from an insurance program, only to re-enroll in the same program within a short period of time. Churning can occur due to income or job volatility among a low-income population that result in frequent changes in eligibility. However, churning can also be an indication that a significant percentage of those disenrolled from coverage were eligible when disenrolled. Because churning is administratively costly for states and disruptive to access to care for eligible individuals, states can benefit greatly by monitoring and seeking to minimize their churn rate.

These measures also allow states to detect and monitor changes in the number of people entering and leaving Medicaid, CHIP and other programs that may arise from the adoption of outreach efforts, renewal simplifications, and other policies.[6] It is particularly important for states to have a good understanding of how many people are experiencing disruptions in coverage, given the emphasis in the Affordable Care Act on making sure that transitions between Medicaid and other coverage sources like plans offered in state health insurance exchanges are seamless for enrollees.

States may want to consider measuring transitions like churning and *non-seamless transfers* over a time period of six months. This is probably longer than what most states would use in thinking about these measures. However,

Second Group Measures
Overall retention at six, 12, and 18 months: *What proportion of individuals entering the program six, 12, or 18 months ago are still enrolled this month?*
Churn: *How many people leaving the program in a given month return within six months?*
Seamless transitions: *How many people leave the program in a given month and enroll in another insurance affordability program, with no gap in coverage?*
Non-seamless transitions: *How many people leave the program in a given month and enroll in another insurance affordability program, with a gap in coverage (e.g., of one- to six-months)?*
Long-term departures: *How many people leave the program in a given month and do not reenroll in any program for more than six months?*
True entries: *How many people enrolling in the program in a given month are truly new to insurance affordability programs (i.e., they did not churn or transfer)?*

most children reenrolling in public coverage within six months are likely to have been eligible during the intervening period, making it an appropriate period for assessment and monitoring.

By tracking all of these measures over time, states can gain a strong sense of their performance across multiple dimensions, including: reaching new pockets of individuals that are program eligible but uninsured; retaining people that remain program eligible; and coordinating coverage so that eligible individuals transition between programs like Medicaid and state exchanges successfully. For example, changes in the number of *true entries* – those who have not previously been enrolled in insurance affordability programs – over time might indicate the state's success or failure in reaching new populations of eligible but unenrolled individuals, or those who lost other types of coverage.

Third Group: Transition and Retention Measures That Account for Why Coverage Ends

The third group of recommended measures incorporates information on *why* people are losing coverage or not enrolling in coverage despite applying. The key distinction with these measures is whether the individuals have (1) been found to not be eligible (for example, becoming too old to qualify for "child coverage" under Medicaid), or (2) been denied for some other administrative reason (for example, a non-returned renewal form) that is not tied to their program eligibility.

These measures are the most ambitious for states to implement because this information on "why" is often not readily available or may be of questionable reliability. One reason for this is that the measures require having a meaningful, consistently applied set of disenrollment or denial "reason codes" – records of the reasons why a person's application was denied, or why a person's enrollment was terminated. Currently, some states maintain well over 100 distinct reason codes, which are often not grouped to allow the state to distinguish among disenrollees who are no longer eligible for a program, and those who may still be eligible but who are disenrolled due to procedural reasons. These codes are far too cumbersome to be used reliably by state eligibility workers, let alone be used to construct perform measures. A separate

> ### Third Group Measures
>
> **Lost-at-entry**: *How many people have their application rejected with their eligibility status unknown?*
>
> **Lost-at-exit**: *How many people are leaving the program with their eligibility status unknown (e.g., information was missing at their redetermination)?*
>
> **Eligible retention rate at six, 12, and 18 months**: *What proportion of those individuals newly enrolled six, 12, or 18 months ago either remain enrolled, or disenrolled because they completed their full spell of eligibility?*

forthcoming brief from *Maximizing Enrollment* and Mathematica provides detailed recommendations to help states standardize reason codes.

MEASURES OF PROGRAM TRANSITIONS (ACCOUNTING FOR PROGRAM INELIGIBILITY)

10. **Lost-at-entry**, which equals the number of rejected program applicants in a given month with unknown eligibility for insurance affordability programs (they do not enroll, and their program ineligibility is not established at the time of application).

11. **Lost-at-exit**, which equals the number of program disenrollees in a given month with unknown eligibility for insurance affordability programs (e.g., they do not transfer, and their program ineligibility is not established at the time of redetermination).

Note that the second measure, *lost-at-exit*, simply reflects a subdivision of the total disenrollment measure by whether program eligibility is known. That is, it counts only those individuals whose program eligibility is not known at disenrollment because they left for administrative or unspecified reasons that cannot be definitely linked to eligibility (such as failure provide complete paperwork at renewal). And, although we note the importance of having reliable reason codes for this measure, *all states can actually produce this lost-at-exit measure right now* – since the default in absence of any reason codes or ability to identify transfers is to have a "loss rate" of 100 percent. Indeed, the adoption of this performance measure with this default rate could be a meaningful incentive for states that have poor coding or data linkages to pursue improvements.[7]

Unfortunately, the *lost-at-entry* measure faces a pair of added challenges. First, many states appear to drop from their systems most or all applications that are not completed; for example, where the family needs to provide additional information to process the application and, for whatever reason, it is not forthcoming. The result is that the eligibility systems retains only applications that are ineligible or approved, which errantly leads to a lost-at-entry rate at or near zero. Second, the applications data often reside at the case or family level, making difficult a reliable count of the individuals that have applied for a program but not been enrolled. In a post-ACA environment where almost all individuals will be eligible for coverage from some source, however, an accurate measure of people who do not complete applications for coverage may be helpful in identifying problems in the application process, or in targeting the assistance provided by outreach workers and navigators.

MEASURE OF RETENTION (ACCOUNTING FOR PROGRAM INELIGIBILITY)

12. **Eligible retention rate**: the proportion of new enrollees in a given month who remain eligible *and* continuously enrolled for different periods of time – e.g., six, 12, and 18 months.

As a refinement to the second group of retention measures above, we recommend a measure of retention that looks more carefully at the program's performance in keeping people who may be eligible for benefits. What distinguishes this *eligible retention rate* measure from the basic measure is that it treats as retained both individuals who remain enrolled *and* those who disenroll only after they are confirmed to be ineligible (that is, they are not *lost-at-exit*). In contrast to the basic measure, this refined measure thus credits a state that more successfully retains individuals for their entire spell of eligible coverage. The formula is:

$$\text{Overall retention rate} = \frac{\text{Total new enrollees in origin month that are not "lost at exit"}}{\text{Total new enrollees in origin month}}$$
$$\text{(e.g. at 6, 12, or 18 months later)}$$

For **lost-at-entry and lost-at-exit**, a meaningful trend downward offers strong evidence that the state is improving its eligibility processes – by enrolling and retaining more eligible people, doing a better job of definitely confirming the eligibility or ineligibility of applicants, or making transfers between programs more seamless. States naturally have limits on how low they can go on these measures, since confirmation of eligibility requires at least some participation of the family, particularly on the enrollment side. Nevertheless, the measures can vary widely across states, suggesting that some states are far more able to confirm the eligibility of their disenrollees than others. For example, among the eight *Maximizing Enrollment* states, the proportion of children lost-at-exit from Medicaid varies from a low of roughly 40 percent to a high of more than 80 percent.

Conclusion

As states think forward to bringing millions of new individuals into health insurance programs, enrollment and retention data will be a vital source for states in assessing their performance and in benchmarking with other states. The *Maximizing Enrollment* diagnostic assessments of enrollment systems revealed that many states might not have strong measures in place to have solid information about whether their enrollment and retention policies are achieving their desired goals. State and federal investments in data systems should prioritize the development of systems that can answer key questions, and drive program improvements. Taking the opportunity afforded by the ACA, states can put performance measurements in place that should give them a much clearer picture of how well they are doing at achieving their intended goals and how their policy choices are impacting the coverage horizon.

SUMMARY OF RECOMMENDED ENROLLMENT AND RETENTION PERFORMANCE MEASURES

First Group: Core Measures of Enrollment and Disenrollment	**1. Total enrollment**: *How many people are enrolled in each insurance affordability program this month?*
	2. Total new enrollment: *How many people are coming into each insurance affordability program this month?*
	3. Total disenrollment: *How many people are leaving each insurance affordability program this month?*
Second Group: Measures of Retention and Transitions Between Programs	**4. Overall retention at six, 12, and 18 months**: *What proportion of individuals entering the program six, 12, or 18 months ago are still enrolled this month?*
	5. Churn: *How many people leaving the program in a given month return within six months?*
	6. Seamless transitions: *How many people leave the program in a given month and enroll in another insurance affordability program, with no gap in coverage?*
	7. Non-seamless transitions: *How many people leave the program in a given month and enroll in another insurance affordability program, with a gap in coverage (e.g., of one- to six-months)?*
	8. Long-term departures: *How many people leave the program in a given month and do not reenroll in any program for more than six months?*
	9. True entry: *How many people enrolling in the program in a given month are truly new to insurance affordability programs (i.e., they did not churn or transfer)?*
Third Group: Transition and Retention Measures That Account for Why Coverage Ends	**10. Lost-at-entry**: *How many people have their application rejected with their eligibility status unknown?*
	11. Lost-at-exit: *How many people are leaving the program with their eligibility status unknown (e.g., information was missing at their redetermination)?*
	12. Eligible retention rate at six, 12, and 18 months: *What proportion of those individuals newly enrolled six, 12, or 18 months ago either remain enrolled or disenrolled because they completed their full spell of eligibility?*

Acknowledgements

Notes

[1] A good discussion of the importance of measurement to advance enrollment policy goals can be found in: Tricia Brooks, Georgetown University Health Policy Institute, Center for Children and Families. "Data Reporting to Assess Enrollment and Retention in Medicaid and SCHIP." January 2009. http://ccf.georgetown.edu/index/data-reporting-to-assess-enrollment-and-retention-in-medicaid-and-schip.

[2] The *Maximizing Enrollment* grantee states are Alabama, Illinois, Louisiana, Massachusetts, New York, Utah, Virginia, and Wisconsin. See www.maxenroll.org for more details.

[3] A separate forthcoming companion brief will discuss recommendations for disenrollment and denial "reason codes" in greater detail.

[4] States are already required to submit quarterly counts of "Unduplicated Children Ever Enrolled" in Medicaid and CHIP through the Statistical Enrollment Data System (SEDS). The annual enrollment of unduplicated children ever enrolled in Title XXI programs reported in SEDS automatically becomes part of states' data reporting to CMS through the CHIP Annual Reporting Template System (CARTS). This information offers an effective means of monitoring trends in total program enrollment both within and across states. However, it does so on a relatively infrequent (annual) basis and does not offer a sense of whether changes in trends are driven more by changes in new enrollment or disenrollment, and how factors like program retention, transfer or churn may be related to these changes.

[5] Note that as a result of the CHIP Reauthorization Act, the 2011 CARTS added new "redetermination and duration measures" that will ask states to prospectively track the enrollment status of cohorts of newly-enrolled children over the course of six, 12, and 18 months. The CARTS measures differs somewhat from the measure proposed here (for example, the cohorts are based on calendar quarters rather than single months), but the efforts are complementary.

[6] These measures can also be expressed as proportions rather than counts, which may be particularly useful in making comparisons across states.

[7] In addition, ACA's new internal and external appeal rights flowing from eligibility decisions in public, publicly subsidized and private coverage may encourage all parties offering coverage to better document eligibility determination rationales.