

Measuring and Monitoring Churn at the State Level: Methods and Data Sources

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Summary

This brief summarizes, “ACA Coverage Expansions: Measuring and Monitoring Churn at the State Level,” one of a series of SHADAC white papers commissioned by the Office of the Assistant Secretary for Planning and Evaluation (ASPE) to explore innovative uses of data resources and analytic approaches that states can apply to monitor and evaluate health care reform efforts. The white paper, by Colin Planalp, Brett Fried, and Julie Sonier, with contributions from Amy Potthoff-Anderson and Jennifer Ricards, is available at <http://www.shadac.org/publications/aca-coverage-expansions-measuring-and-monitoring-churn-state-level>



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Introduction

State policymakers have been concerned for years with “churn” – individuals cycling between Medicaid coverage and uninsurance due to changes in coverage eligibility or administrative barriers – but the phenomenon of churn has taken on new dynamics since implementation of the Affordable Care Act (ACA). With enhanced access to affordable health insurance options, including subsidized exchange-based coverage and (in many states) expanded Medicaid coverage, fewer individuals will lose coverage altogether due to changing eligibility. Instead more people will shift between sources of coverage, thereby avoiding the most severe consequences of churn involving uninsurance: foregone or delayed care (Ku, Steinmetz, & Bruen, 2013). However, states will still face churn-related costs, such as the administrative costs of enrolling, disenrolling and re-enrolling individuals who churn in and out of Medicaid (Fairbrother, 2005; Fairbrother et al., 2004). And in those cases when individuals do lose coverage altogether, states will tend to face higher health care costs for some individuals when they re-enroll, as previously controlled health conditions are aggravated during periods of uninsurance (Bindman, Chattopadhyay, & Auerback, 2008; Hall, Harman, & Shang, 2008).

Even when people experience transitions between coverage sources rather than between coverage and uninsurance, they may still experience health and financial consequences from these transitions, such as challenges finding and accessing new in-network providers and obtaining prescriptions within new drug formularies (Lavarreda, Gatchell, Ponce, Brown, & Chia, 2008). Additionally, states with state-based health insurance exchanges will face new administrative costs from churn into and out of subsidized private coverage.

The purpose of this brief to explain:

- The phenomenon of churn and how the dynamics are evolving under the ACA,
- Examples of ways that states can reduce or mitigate churn, and
- A framework for states to estimate the amount of churn affecting their Medicaid and marketplace populations, and how churn may be affected by different policy options for addressing the issue

Background

Historically, concern with pre-ACA churn between Medicaid and uninsurance focused on to two main issues: (1) program “dropout,” in which an individual is disenrolled for administrative reasons (e.g., lapses in re-enrollment paperwork), and (2) loss of eligibility due to changes in income or family composition (Sommers, 2005).

Under the ACA, the issue of program dropout will continue to some extent; however, dropout is likely to become less prevalent due to ACA-related changes that streamline the Medicaid re-enrollment process, such as simplified paperwork and a standardized 12-month re-enrollment period (pre-ACA, some states used 6-month re-enrollment periods).

In comparison to dropout, the issue of changes in income eligibility has become more complex under the ACA, with the establishment of new health insurance options and changes to income eligibility thresholds. Additionally, the dynamics of churn differ by state according to whether they have elected to expand their Medicaid programs. In Medicaid expansion states, income eligibility thresholds rise to 138 percent of the Federal Poverty Guideline (FPG), followed by an eligibility range of 139 to 400 percent FPG for health insurance exchange subsidies (Figure 1). In non-expansion states, Medicaid income eligibility thresholds vary, with a median of 49 percent FPG for parents (Kaiser Commission on Medicaid and the Uninsured, 2014). In these states, eligibility for exchange subsidies begins at 100 and ends at 400 percent FPG, leaving a “coverage gap” between Medicaid and exchange subsidy eligibility.

Because of the coverage gap, churn between Medicaid and uninsurance is likely to continue at levels similar to before the ACA in Medicaid non-expansion states. However, in expansion states, churn between Medicaid and uninsurance should decrease, and the new form of churn between Medicaid and subsidized exchange coverage will be more prevalent.

Policy Options for Addressing Churn

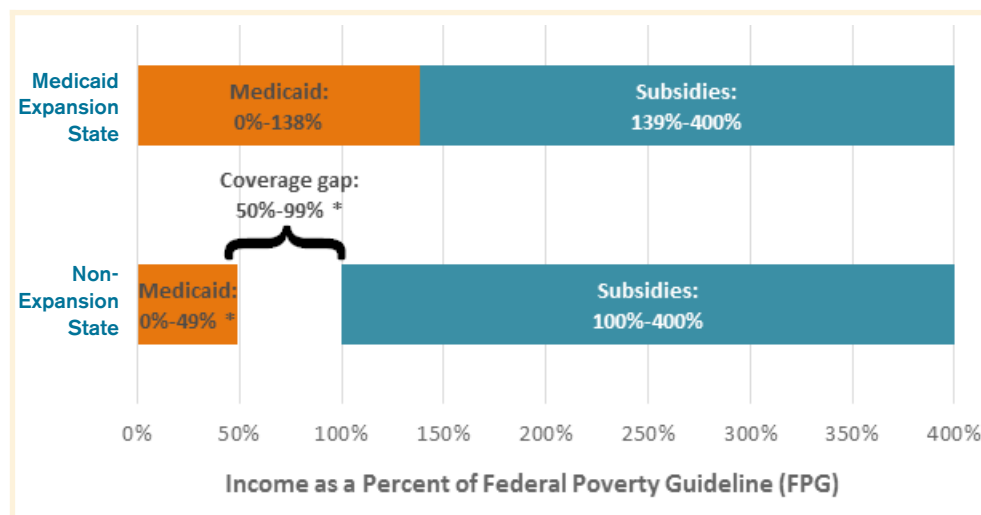
There are two general policy approaches for addressing churn: (1) reduce the overall prevalence of churn (i.e., fewer people would be churning), and (2) smooth the impact of churn transitions (i.e., the same number of people would be churning but with mitigated effects). While the specific options described below are not exhaustive, they provide examples of these two situations in which states may wish to estimate churn.

Reducing the Prevalence of Churn: Continuous Eligibility

One option for reducing the number of people who churn in and out of Medicaid is to implement a 12-month continuous eligibility policy. Under this option, open to states under a Section 1115 waiver

(Mann, 2013), individuals remain enrolled in Medicaid for 12 months from their enrollment date regardless of any changes in their income eligibility status during that time. This would not eliminate churn because people could still be disenrolled at the end of the 12-month period and churn into uninsurance or subsidized exchange-based coverage; but it would reduce

FIGURE 1. PROGRAM ELIGIBILITY THRESHOLDS IN MEDICAID EXPANSION VS. MEDICAID NON-EXPANSION STATES



* Because eligibility for Medicaid varies by state according to different eligibility categories, income thresholds for the coverage gap also will vary by state and by eligibility categories. The Medicaid coverage gap threshold in Figure 1 uses the median Medicaid eligibility threshold of 49 percent of FPG for parents in non-expansion states (Kaiser Commission on Medicaid and the Uninsured, 2014).

Continuous Eligibility: New York

In 2014, New York became the first state to receive approval from the Centers for Medicare & Medicaid Services to provide 12-month continuous eligibility for certain Medicaid expansion populations (Mann, 2014).

Premium Assistance: Arkansas and Iowa

In 2014, Arkansas and Iowa expanded their Medicaid programs through premium assistance, although their designs differed. Arkansas used premium assistance for its entire expansion population, while Iowa used premium assistance only for individuals between 101% and 138% of FPG (Arkansas Medicaid, 2013; Iowa Department of Human Services, n.d.)

churn among individuals whose circumstances change multiple times within a year.

Smoothing Churn Transitions: Premium Assistance

An option for easing churn transitions is to provide Medicaid beneficiaries with the same coverage available in health insurance exchanges. This could be done by expanding Medicaid via a premium assistance system, in which Medicaid beneficiaries obtain private coverage through exchanges, which is paid for using Medicaid dollars (Howard & Shearer, 2013). In this case, individuals would continue to churn between Medicaid and insurance subsidies; however, because they would have access to the same health insurance plans in each, they should experience smoother care transitions (e.g., access to the same provider networks and medications).

A Framework for Estimating Churn

As states consider the phenomenon of churn and policy options to address it, they will want to estimate the size of the issue and effects of possible interventions. This section lays out a four-step framework for developing a churn estimate.

Step 1: Identify the Purpose of Your Estimate

Because of the complexity of churn, there is no single best approach for producing an estimate. To ensure

the estimate is tailored to your needs, it is important to identify the specific purpose of the estimate. Questions to consider include:

- Are you interested in monitoring the existing level of churn, or do you want to forecast future churn?
- Do you want to estimate churn under existing circumstances, or are you interested in estimating the impact of policy options for addressing churn?
- Are you concerned only with an estimate of the overall size of churn, or do you have more-specific analytic questions (e.g., who is more likely to churn, what are the key drivers of churn, etc.)?

Step 2: Define the Churn Type of Interest

Precisely defining the type of churn for your estimate is important because the term “churn” encompasses many sub-types. Because of the variety of sub-types

Framework for a Churn Estimate

Step 1: Identify the specific purpose of your estimate

Step 2: Precisely define the type of churn of interest to your estimate

Step 3: Identify the best model for your particular churn estimate

Step 4: Select a data source for producing your estimate

of churn, simply adopting an existing approach to estimating churn may not meet your needs. For example, some published estimates of churn count each one-way change in eligibility category (e.g., from Medicaid to subsidies); however, if you were interested only in people who make a full loop (e.g., starting in Medicaid, leaving for a period, then returning to Medicaid), then using that existing approach could result in overestimation.

To target your estimate to the particular type of churn that is of interest, you should consider two ways to subdivide churn.

Coverage Type

What are the coverage types of interest in your estimate (see Figure 2)? For example, are you interested only

in churn between Medicaid and subsidized exchange-based coverage, or only in churn between Medicaid and uninsurance?

Directionality

What directionality of churn are you concerned with (see Figure 3)? For example, are you interested in each one-way shift (e.g., from Medicaid to uninsurance) or are you interested only in complete two-way loops (e.g., from Medicaid to uninsurance, and back to Medicaid)?

Step 3: Identify a Model for Your Estimate

After considering the purpose of your estimate and the specific type of churn of interest, you should identify a model type for producing the estimate. There are two model types with their own strengths and weaknesses.

Income Eligibility Model

An income eligibility model estimates potential churn by using longitudinal data on income and family composition to identify changes in FPG across eligibility thresholds (e.g., a shift from Medicaid-eligible 125% FPG to exchange subsidy-eligible 150% FPG).

Strengths

This model type can be used to forecast potential churn using pre-ACA data. For example, a state considering Medicaid expansion could use earlier data to estimate

FIGURE 2. CHURN DEFINITIONS BY COVERAGE TYPE

Medicaid-Uninsurance	A change from Medicaid to being uninsured, or from being uninsured to having Medicaid coverage
Uninsurance-Exchange	A change from being uninsured to having subsidized exchange coverage, or from having subsidized exchange coverage to being uninsured
Medicaid-Exchange	A change from having Medicaid coverage to having subsidized exchange-based coverage, or from having subsidized exchange-based coverage to having Medicaid

the number of people who might shift between Medicaid and subsidy eligibility thresholds.

Weaknesses

Because this model only includes income eligibility data, it does not account for other factors that may affect churn. For example, it does not consider whether individuals will actually enroll in coverage, and it does not consider churn due to program dropout.

Enrollment Model

An enrollment model of churn can be used to produce a more-complete estimate of churn because it accounts for both eligibility and non-eligibility factors (e.g., take-up and dropout). It does this by using longitudinal data on program enrollment, which could come from

administrative data on enrollment or survey data with self-reported enrollment.

Strengths

Because enrollment models account for both eligibility and non-eligibility factors, they should provide a more-complete estimate of churn.

Weaknesses

Enrollment models of churn are limited in their ability to forecast churn under different policy options

FIGURE 3. CHURN DEFINITIONS BY DIRECTIONALITY

Term	Description	Illustration
One-way shifting	A one-way shift from one coverage type to another coverage type (e.g., from Medicaid coverage to subsidized exchange-based coverage).	
Two-step shifting	A two-step shift starting in one coverage category, shifting to another category, and ending in a third category (e.g., from Medicaid coverage to uninsurance, then from uninsurance into subsidized coverage).	
Two-way looping	A two-way loop in coverage, in which a person starts in one coverage category, shifts to another category and returns to the original category (e.g., from Medicaid to subsidized coverage, then back to Medicaid coverage).	

Medicaid Income Eligibility

Income eligibility for Medicaid is based on two factors--income and family size--and a change in either may affect a person's income eligibility.

For example, a couple earning \$24,000 (153% FPG) would qualify for subsidies to purchase private coverage through an exchange. However, if their income dropped to \$20,000 (127% of FPG), they would qualify for Medicaid in an expansion state. Alternatively, if that couple earning \$24,000 added a child to their family, their household of three (now at 121% of FPG) would qualify for Medicaid.

because those policy options may affect the non-eligibility factors of churn. For example, a state using pre-ACA data to produce an enrollment estimate of churn under Medicaid expansion would have to assume that take-up and dropout rates would remain the same; however, it is uncertain how ACA-related changes, such as inclusion of new populations in Medicaid and efforts to simplify the re-enrollment process, will affect take-up and dropout.

Step 4: Select a Data Source for Your Model

In selecting a data source, there are two broad categories--survey data and administrative data--each with multiple potential sources, as well as a third potential category involving linkages across survey and administrative data. Certain data sources will be better fit to certain types of estimates, so you should carefully select data sources according to their strengths and weaknesses (Figures 4 and 5).

FIGURE 4. SURVEY DATA SOURCES

Survey	Monthly Income Estimate	Monthly Enrollment Estimate	State-Level Data
BRFSS		Limited ability for rough estimate in 38 states	X
CPS		Possibly, pending how data are released	X
SIPP	X	X	
MEPS-HC		X	

Survey data

- Behavioral Risk Factor Surveillance System (BRFSS)
- Current Population Survey (CPS)
- Survey of Income and Program Participation (SIPP)
- Medical Expenditure Panel Survey-Household Component (MEPS-HC)

Administrative data

- Medicaid data (state or federal data)
- Exchange data (state)

Data linkages

- Medicaid-Exchange linked data

When selecting a data source, you will want to consider multiple factors, including:

- Does the source allow you to observe your specific definition of churn? For example, for an estimate of Medicaid-Exchange churn, does the data source capture both types of coverage?
- Does the source support the type of model you plan to use? For example, for an income estimate of churn, does the data source include monthly income and family composition, or are the income and family data collected too infrequently (e.g., only collected once)?
- Does the source have state-level data available, so you could tailor an estimate to your state's characteristics rather than rely on more-general national characteristics?
- Does the source include important co-variates?

FIGURE 5. ADMINISTRATIVE DATA SOURCES

Source	Monthly Income Estimate	Monthly Enrollment Estimate	State-Level Data
Medicaid		X	X
Exchange		X	X
Medicaid-Exchange Linked Data		X	X

For example, if you are interested in characteristics of likely churners, does the data source capture sufficient demographic information (e.g., age, race, gender, etc.)?

Conclusion

While the issue of churn has changed substantially since implementation of the ACA, it has not disappeared. There are a number of reasons that states may be interested in estimating churn, such as understanding the scope of the phenomenon, who is likely to be affected and how they are impacted. States may also be considering policy options to address churn and what effects these options could have. Because the topic of churn is complex, there is no single best approach to estimating churn. Instead, the key is

developing an approach that is tailored to a state's specific goals for the estimate.

About SHADAC

The State Health Access Data Assistance Center is a multidisciplinary state health policy research center located at the University of Minnesota School of Public Health. For more information, visit our website at www.shadac.org, or contact us at shadac@umn.edu or 612-624-4802.

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