

Disability Policy Issue Brief

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Rates of Medicaid Churn and Continuous Coverage Among Children and Working-Age Adults with Disability-Related Eligibility

Access to health services and long-term services and supports (LTSS) is often critical to the well-being of people with disabilities. However, sometimes Medicaid beneficiaries, including those with disabilities, disenroll from the program, only to return to the rolls a few months later—an event often referred to as “churn.” In this brief, we use data from the Transformed Medicaid Statistical Information System Analytic File to examine rates of disenrollment, churn, and continuous coverage among various categories of children and working-age adult Medicaid beneficiaries whose eligibility is disability related. We find meaningful variation in disenrollment and churn across beneficiary categories. Beneficiaries with Supplemental Security Income (SSI)-related eligibility have especially low rates of disenrollment and high rates of reenrollment when compared with other categories of beneficiaries.

Introduction

Medicaid is a federal and state program that finances health services and LTSS for people with low income in the United States. Some Medicaid beneficiaries qualify for coverage solely based on their limited income and assets whereas others must meet additional criteria to qualify, such as having a disability.¹ The services and supports Medicaid provides—especially to people with disabilities—can be critical to individual health and well-being (Creedon et al. 2022).

Disenrollment followed by reenrollment within a few months—an event sometimes referred to as “churn”—is an issue of concern for Medicaid policymakers. Temporary fluctuations of income can create churn, but excessive churn rates might stem from administrative barriers or state

policy decisions that disrupt Medicaid coverage (Medicaid and CHIP (Children’s Health Insurance Plan) Payment and Access Commission [MACPAC], 2021). Disruptions in coverage have been associated with higher administrative costs for states and delays in care for beneficiaries (Iezzoni 2011), which increase health costs (Sugar et al. 2021).

This brief focuses on churn among child (ages 0–17) and working-age adult (ages 18–64) beneficiaries whose eligibility for Medicaid was disability related.² Using enrollment from the Transformed Medicaid Statistical Information System (T-MSIS) Analytic File (TAF), we extend the analysis of MACPAC (2021) to report disenrollment, reenrollment, and continuous coverage trends in 2018 across four disability-related eligibility pathways to Medicaid coverage.

Background

Individuals qualify for Medicaid coverage by meeting specific eligibility requirements. However, different sets of eligibility requirements exist for different pathways to eligibility. Most eligibility pathways include a financial component, but some also have other requirements, such as having certain medical or functional needs.

This brief focuses on eligibility pathways that include disability-related criteria. Using a framework developed by Colello and Morton (2019), we separate Medicaid beneficiaries whose eligibility is disability related into four categories: current Supplemental Security Income (SSI) recipients, special groups of former SSI recipients, other SSI-related groups, and other disability-related pathways (Table 1).

SSI-related eligibility pathways

SSI is a means-tested program administered by the Social Security Administration (SSA) that provides cash payments to children with disabilities, working-age adults with disabilities, and people aged 65 or older with limited income and assets. In September 2022, SSI provided payments to 12.2 million children and working-age adults with disabilities (Social Security Administration 2022a). The federal SSI monthly payment amounts in 2022 are \$841 for an eligible individual and \$1,261 for an eligible couple (Social Security Administration 2022b). To meet the medical eligibility criteria for SSI, a working-age adult must have a medically determinable condition that prohibits them from engaging in substantial gainful activity and is expected to last

Table 1. Categorization of disability-related pathways to Medicaid eligibility

Category	Pathways included in category
Current SSI Recipients	SSI recipients in “1634 states” or “SSI-criteria states”
	SSI recipients and other aged, blind, and disabled individuals in “209(b) States”.
	Individuals eligible for only optional SSPs
	Individuals receiving mandatory SSPs
	Individuals with earnings above certain limits (1619[a] and 1619[b])
Special Groups of Former SSI Recipients	Recipients of Social Security COLAs after April 1977 (“Pickle Amendment”)
	Disabled widow(er)s receiving benefit increases under P.L. 98-21 (“Adjusted reduction factor widow[er]s”)
	Disabled adult children
	Widow(er)s not entitled to Medicare Part A (“early widow[er]s”)
	Recipients of a 1972 Social Security COLA
Other SSI-Related Groups	Grandfathered 1973 Medicaid recipients
	Individuals eligible for but not receiving SSI/SSP
	Individuals who would be eligible for SSI/SSP if they were not institutionalized
	Individuals who would be eligible for SSI/SSP if not for criteria prohibited by Medicaid
Other disability-related pathways	Poverty-related
	Special income level
	Special home and community-based services (HCBS) waiver group
	HCBS state plan
	Individuals with earnings above certain limits (1619[a] and 1619[b])
	Katie Beckett
	Buy-In (BBA 97 Eligibility Group, Ticket to Work Basic Eligibility Group, Ticket to Work Medical Improvement Group, Family Opportunity Act)
	Medically needy

at least one year or end in death.³ For non-blind individuals, the medical eligibility criteria for SSI is different for children and working-age adults.⁴ Just before they turn age 18, the ongoing SSI eligibility of child recipients is reevaluated using the adult medical criteria (Hemmeter et al. 2009). SSA uses a five-step process to determine medical eligibility for SSI for working-age adults (Mann et al. 2017).

Current SSI recipients may have several pathways to Medicaid eligibility. Most states provide Medicaid benefits automatically to anyone who meets the SSI financial and medical criteria. These states are known either as “1634 states” or “SSI criteria states,” depending on whether the state conducts its own eligibility determination or relies on SSA’s assessment. Conversely, “209(b) states” require that SSI recipients meet additional criteria to qualify for Medicaid coverage. Some states offer State Supplementary Payments (SSPs) to SSI recipients in addition to the federal payment monthly amount.⁵ Those with sufficient income to qualify for a SSP, but not the federal payment, are still considered current SSI recipients from a Medicaid eligibility perspective. Finally, people with sufficient earnings to no longer qualify for SSI payments can retain their Medicaid beneficiary status through 1619(a) or 1619(b) authorities. Under 1619(b), for instance, people who still meet SSI medical eligibility criteria but have earnings greater than the SSI eligibility limit may keep their Medicaid eligibility if their earnings are not large enough to provide a reasonable equivalent of Medicaid and other publicly funded health benefits.

A relatively small number of Medicaid beneficiaries are part of special groups of former SSI recipients. These special groups are established by legislation that extend Medicaid coverage in certain situations. For example, Section 503 of Public Law (P.L.) 94-566 extends Medicaid coverage to individuals who would otherwise be eligible for SSI or SSP payments if not for increases in their Social Security retirement benefits due to cost-of-living adjustments (COLAs). People may also retain their Medicaid

eligibility if they no longer qualify for SSI or SSP payments because they start receiving Disabled Adult Child benefits under the Social Security Disability Insurance program. Though relatively few people are in the special groups, these groups collectively constitute a unique, standalone category of Medicaid beneficiaries with SSI-related eligibility.

The other SSI-related eligibility group consists of people with disabilities who were either eligible for Medicaid when SSI began in 1974 or would currently be eligible for SSI or SSP except for a specific, special circumstance. Sections 230 to 232 of P.L. 93-66 require that states continue eligibility for Medicaid beneficiaries from December 1973 whose conditions meet state plan criteria for disability. Sometimes people would be eligible for SSI or SSP if not for special circumstances, such as being institutionalized or receiving certain settlement payments. Special allowances have been made in these situations so that those affected still qualify for Medicaid coverage.

Other disability-related eligibility pathways

Some people qualify for Medicaid benefits through a pathway that is disability related but not connected to SSI eligibility. States often establish these additional pathways to help people with disabilities access Medicaid-covered LTSS. States can offer Medicaid eligibility, for example, to individuals with disabilities who do not qualify for SSI based on income. In 2018, 24 states and the District of Columbia offered poverty-related eligibility pathways to people with disabilities, with income eligibility limits ranging between 77 percent and 100 percent of the federal poverty level. Some pathways to Medicaid eligibility alter income limits for parents with children who meet SSI medical eligibility criteria, live at home, and require LTSS. In some states, people with disabilities who earn more than the income limit for SSI can buy into Medicaid or still qualify for Medicaid if they spend more than a certain percentage of their income on medical costs.

Findings

Below we describe churn among child and working-age adult Medicaid beneficiaries whose eligibility is disability related. In Table 2, we present disenrollment and reenrollment trends. Table 3 contains continuous coverage statistics for our population of interest. In each table, we present results by age group and the Medicaid eligibility pathway categories described in the previous section.

Age is important to consider when examining Medicaid eligibility because eligibility criteria can differ between children and adults. In addition, Medicaid plays a key role in covering complimentary LTSS for certain populations and assists beneficiaries with certain health costs based on their age (Borella et al. 2018). Age is also important to our analysis because most Medicaid beneficiaries in our population of interest receive or have received SSI payments. The medical eligibility requirements for SSI are different for children and working-age adults, which might have implications for Medicaid eligibility churn in each group.

Disenrollment and reenrollment

Compared to other eligibility groups, child Medicaid beneficiaries with SSI-related eligibility had relatively low disenrollment rates (Table 2). Among child Medicaid beneficiaries who were also SSI recipients, 11 percent disenrolled in 2018. Similarly, just 12 percent of child Medicaid beneficiaries with other SSI-related eligibility disenrolled. Most of these beneficiaries reenrolled in Medicaid within 3 to 12 months of disenrollment. For example, among the child SSI recipients who disenrolled from Medicaid in 2018, about 66 reenrolled within 3 months and 74 percent reenrolled within 12 months. One group of child beneficiaries with SSI-related eligibility—special groups of former SSI recipients—disenrolled at the relatively high rate of about 42 percent. Just 9 percent of children in this group who disenrolled from Medicaid reenrolled within 3 months and 31 percent reenrolled within 12 months. However, with only 2,622 children, the special groups of former

SSI recipients represent a small fraction of all child Medicaid beneficiaries with SSI-related eligibility.

Conversely, child Medicaid beneficiaries with other disability-related eligibility were more likely to disenroll, though they too often reenrolled. Specifically, 35 percent of the 276,514 child Medicaid beneficiaries with other disability-related eligibility disenrolled in 2018. However, within 3 months of disenrolling, 81 percent had already reenrolled.

Among working-age adult Medicaid beneficiaries, we observe a similar pattern—beneficiaries with SSI-related Medicaid eligibility were the least likely to disenroll. About 10 percent of the 4.1 million working-age adult Medicaid beneficiaries who were also SSI recipients in 2018 disenrolled from Medicaid. Most (60 percent) reenrolled within 3 months of leaving the Medicaid rolls. Other working-age adults with SSI-related Medicaid eligibility—special groups of former working-age adult SSI recipients and working-age adults with other SSI-related eligibility—had disenrollment rates of 11 to 14 percent. However, of the 1.5 million working-age adults with other disability-related eligibility in 2018, 21 percent disenrolled from Medicaid—more than twice the disenrollment rate of working-age adult SSI recipients. Like child Medicaid beneficiaries with other disability-related eligibility, most (63 percent) of these working-age adults reenrolled within 3 months.

Table 2. Rates of disenrollment and reenrollment in Medicaid among beneficiaries with disability related eligibility, 2018

Category	Number of beneficiaries ever enrolled in 2018 included in analysis	Beneficiaries disenrolled in 2018		Beneficiaries disenrolled in 2018 who reenrolled within 3 months			Beneficiaries disenrolled in 2018 who reenrolled within 12 months		
		Number	Share of all beneficiaries	Number	Share of all beneficiaries	Share of disenrollments in category	Number	Share of all beneficiaries	Share of disenrollments in category
Total	7,260,600	993,211	13.7%	620,062	8.5%	62.4%	714,913	9.9%	72.0%
Children	1,321,998	212,054	16.0%	150,928	12.0%	71.2%	165,489	12.5%	78.0%
Child SSI recipients	987,935	108,549	11.0%	71,338	7.2%	65.7%	80,348	8.1%	74.0%
Special groups of former child SSI recipients	2,622	1,092	41.6%	95	3.6%	8.7%	339	12.9%	31.0%
Children with other SSI related eligibility	54,927	6,522	11.9%	1,967	3.6%	30.2%	2,949	5.4%	45.2%
Children with other disability-related eligibility	276,514	95,891	34.7%	77,528	28.0%	80.9%	81,853	29.6%	85.4%
Working-age adults	5,938,602	781,157	13.2%	469,096	7.9%	60.1%	549,406	9.3%	70.3%
Working-age adult SSI recipients	4,118,028	417,534	10.1%	252,775	6.1%	60.5%	290,144	7.1%	69.5%
Special groups of former working-age adult SSI recipients	108,036	12,261	11.3%	6,150	5.7%	50.2%	7,695	7.1%	62.8%
Working-age adults with other SSI-related eligibility	201,572	27,600	13.7%	8,305	4.1%	30.1%	13,764	6.8%	49.9%
Working-age adults with other disability-related eligibility	1,510,966	323,762	21.4%	201,866	13.4%	62.4%	237,803	15.7%	73.4%

Source: Mathematica, 2022 analysis of 2017, 2018, and 2019 TAF data version 7.

Notes: Children include people ages 0 to 17; working-age adults include people ages 18 through 64. Analysis excludes partial benefit enrollees. Analysis excludes Florida, Kentucky, Mississippi, Nebraska, Oklahoma, Oregon, Utah, and Wyoming because of incomplete or unreliable TAF data.

Continuous coverage

Among Medicaid beneficiaries with disability-related eligibility, 3 percent had fewer than 12 months of continuous coverage (Table 3). The percentage of beneficiaries without 12 months of continuous coverage is substantively lower than the 14 percent of beneficiaries who disenrolled in 2018. This is because most beneficiaries who disenrolled in 2018 had 12 months of continuous coverage when counting months of enrollment in 2017. We observe a similar overall pattern for continuous coverage as we did for disenrollment: Medicaid beneficiaries with SSI-related eligibility were less likely to experience a disruption in Medicaid coverage and more likely to have continuous

coverage for 12 months or more. For example, the mean length of first span of coverage in 2018 was 10.9 months for child SSI recipients; just 2 percent of them had fewer than 12 months of continuous coverage. In contrast, children with other disability-related coverage had a mean length of first span of coverage of 8.2 months in 2018 and 12 percent had fewer than 12 months of continuous coverage. These patterns are also seen among working-age adults. Comparing working-age adult SSI recipients to working-age adults with other disability-related eligibility, SSI recipients were 4 percentage points less likely to have fewer than 12 months of continuous coverage and had a mean length of first span of coverage that was 1.1 months larger.

Table 3. Rates of 12-month continuous coverage in Medicaid among beneficiaries with disability-related eligibility, 2018

Category	Number of beneficiaries ever enrolled in 2018 included in analysis	Beneficiaries with fewer than 12 months of continuous coverage		Mean length of first span of coverage (capped at 12 months)
		Number	Share of all beneficiaries	Months
Total	7,260,600	238,131	3.3%	10.7
Children	1,321,998	57,780	4.4%	9.7
Child SSI recipients	987,935	19,835	2.0%	10.9
Child former SSI recipients	2,622	157	6.0%	9.2
Children with SSI-related eligibility	54,927	3,836	7.0%	10.5
Children with other disability-related eligibility	276,514	33,952	12.3%	8.2
Working-age adults	5,938,602	180,351	3.0%	10.7
Working-age adult SSI recipients	4,118,028	83,489	2.0%	11.0
Working-age adult former SSI recipients	108,036	1,932	1.8%	11.0
Working-age adults with SSI-related eligibility	201,572	7,199	3.6%	10.7
Working-age adults with other disability-related eligibility	1,510,966	87,731	5.8%	9.9

Source: Mathematica, 2022, analysis of TAF data version 7.

Notes: Children include people ages 0 to 17; working-age adults include people ages 18 to 64. Analysis excludes partial benefit enrollees. Analysis excludes Florida, Kentucky, Mississippi, Nebraska, Oklahoma, Oregon, Utah, and Wyoming because of incomplete or unreliable TAF data.

Discussion

Our analysis of churn among Medicaid beneficiaries whose eligibility was disability related revealed that disenrollment rates were lowest for youth and working-age adults whose eligibility was connected to SSI. We also found across eligibility pathways that disenrollment rates were higher for children when compared with working-age adults and most beneficiaries who disenrolled from Medicaid reenrolled within 12 months, suggesting that these individuals might have experienced multiple disruptions in their care due to multiple changes in their coverage.

Comparing the results of this analysis to MACPAC (2021), which examined churn among all Medicaid beneficiaries, Medicaid beneficiaries whose eligibility was disability-related were less likely to disenroll and more likely to reenroll within 12 months of disenrolling. According to MACPAC (2021), about 21 percent of all Medicaid beneficiaries disenrolled in 2018, compared to about 14 percent of Medicaid beneficiaries whose eligibility was disability related. Despite disenrolling from Medicaid at a lower rate, about 10 percent of beneficiaries whose eligibility was disability related reenrolled within 12 months of disenrollment—almost two percentage points more than the average beneficiary, according to the MACPAC (2021) analyses. MACPAC (2021) examined two categories of Medicaid beneficiaries whose eligibility was disability-related—children with disabilities and adults with disabilities—but did not break down these beneficiaries into smaller eligibility pathways. Consequently, MACPAC (2021) was unable to examine differences in churn across eligibility pathways.⁶

Our analysis revealed meaningful variation in churn between beneficiaries with disability-related eligibility and Medicaid beneficiaries whose eligibility was based on other criteria such as income alone. Comparing our analysis of SSI recipients to the MACPAC (2021) statistics, children and working-age adult SSI recipients disenrolled from Medicaid

42 percent and 64 percent less, respectively, than Medicaid beneficiaries whose eligibility was based on their income. Conversely, beneficiaries whose eligibility was connected to other disability-related criteria had disenrollment and continuous coverage rates similar to those whose eligibility was not disability-related. Reenrollment rates also noticeably varied across groups. Among those who disenrolled, 44 percent of child beneficiaries and 32 percent of work-age adult beneficiaries whose eligibility was based on their income reenrolled in Medicaid within 12 months. In contrast, among beneficiaries who disenrolled and had SSI-related eligibility, 74 percent of children and 70 percent of working-age adults reenrolled. For beneficiaries with other disability-related eligibility who disenrolled, 85 percent of children and 73 percent of working-age adults reenrolled in Medicaid.

Although Medicaid is a critical benefit for SSI recipients and others whose eligibility is related to disability, a substantive proportion of these beneficiaries still lose coverage. Some SSI recipients lose Medicaid coverage because of increased earnings or assets. However, the same medical condition that qualifies someone for SSI payments might require routine medical monitoring or intervention to maximize their quality of life. Consequently, SSI recipients may be more strongly motivated, on average, to maintain their Medicaid eligibility. A similar argument can be made for beneficiaries with other disability-related eligibility. Therefore, the high rates of churn we observe suggest that many of these beneficiaries lose coverage because they do not respond properly to documentation requirements or eligibility redetermination processes. In these situations, beneficiaries often regain coverage when they need medical care and providers—especially hospitals—help them reenroll.

Although SSI recipients can leave Medicaid, the extent to which such exits explain the disenrollment trends we observed for beneficiaries with SSI-related eligibility is unclear. Following a cohort of new SSI recipients, 95 percent were

still eligible for payments 12 months after entering the program and 87 percent were still eligible for payments 60 months after entering the program (Rupp et al, 2011).⁷ These SSI eligibility duration statistics are consistent with the low disenrollment rates of 11 percent and 10 percent, respectively, that we observe for children and working-age adults with SSI-related Medicaid eligibility. However, as discussed above, SSI recipients who no longer qualify for federal SSI payment but meet certain other criteria can maintain their eligibility for Medicaid (Collelo and Morton 2019; Social Security Administration 2022e). Currently, we cannot disaggregate how much Medicaid churn is the result of SSI receipt transitions.

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References

- Borella, M., M. De Nardi, and E. French. "Who Receives Medicaid in Old Age? Rules and Reality." *Fiscal Studies*, vol. 39, 2018, pp. 65–93. <https://doi.org/10.1111/1475-5890.12145>.
- Collelo, H., and Morton, W.R. "Medicaid Eligibility: Older Adults and Individuals with Disabilities." Congressional Research Service, Summary, R46111, December 9, 2019. Available at <https://crsreports.congress.gov/product/pdf/R/R46111>.
- Creedon, T.B., S.H. Zuvekas, S.C. Hill, M.M. Ali, C. McClellan, and J.G. Dey. "Effects of Medicaid Expansion on Insurance Coverage and Health Services Use Among Adults with Disabilities Newly Eligible For Medicaid." *Health Serv Res.* 2022, pp. 1–12. doi:10.1111/1475-6773.14034.
- Hemmeter, Jeffrey, Jacqueline Kauff, and David Wittenburg. "Changing Circumstances: Experiences of Child SSI Recipients Before and After Their Age-18 Redetermination for Adult Benefits." *Journal of Vocational Rehabilitation*, vol. 30, September 2009, pp. 201–221.
- Iezzoni, Lisa I. "Eliminating Health and Health Care Disparities Among the Growing Population of People with Disabilities." *Health Affairs*, vol. 30, no. 10, 2011, pp. 1947–1954. Available at <https://www.healthaffairs.org/doi/10.1377/hlthaff.2011.0613>.
- Mann, David R., David C. Stapleton, and Jeanette de Richemond. "Vocational Factors in the Social Security Disability Determination Process: A Literature Review." Disability Research Consortium Working Paper 2014–17. Washington, DC: Mathematica Policy Research, July 21, 2014.
- Medicaid and CHIP Payment and Access Commission. "An Updated Look at Rates of Churn and Continuous Coverage in Medicaid and CHIP." Washington, DC: Medicaid and CHIP Payment and Access Commission, October 2021. Available at <https://www.macpac.gov/wp-content/uploads/2021/10/An-Updated-Look-at-Rates-of-Churn-and-Continuous-Coverage-in-Medicaid-and-CHIP.pdf>.
- Rupp, Kalman, and Gerald F. Riley. "Longitudinal Patterns of Participation in the Social Security Disability Insurance and Supplemental Security Income Programs for People with Disabilities." *Social Security Bulletin*, vol. 71, no. 2, 2011. Woodlawn, MD: Office of Retirement and Disability Policy, Social Security Administration. Available at <https://www.ssa.gov/policy/docs/ssb/v71n2/v71n2p25.html>.
- Social Security Administration. "Monthly Statistical Snapshot, September 2022." October 2022. Available at https://www.ssa.gov/policy/docs/quickfacts/stat_snapshot/. Accessed on October 12, 2022.

Social Security Administration. "SSI Federal Payment Amounts For 2023." Available at <https://www.ssa.gov/oact/cola/SSI.html#:~:text=SSI%20amounts%20for%202022,%24421%20for%20an%20essential%20person.> Accessed on October 12, 2022.

Social Security Administration. "Substantial Gainful Activity." Available at <https://www.ssa.gov/oact/cola/sga.html>. Accessed on October 12, 2022.

Social Security Administration. "Understanding Supplemental Security Income SSI for Children—2022 Edition." Accessed on October 21, 2022. Available at <https://www.ssa.gov/ssi/text-child-ussi.htm>.

Social Security Administration. "Continued Medicaid Eligibility (Section 1619(B))." Accessed on October 12, 2022. Available at <https://www.ssa.gov/disabilityresearch/wi/1619b.htm>.

Sugar, S., C. Peters, N. De Lew, and B. Sommers. "Medicaid Churning and Continuity of Care: Evidence and Policy Considerations Before and After the COVID-19 Pandemic." Washington, DC: Office of the Assistant Secretary for Planning and Evaluation, U.S. Department of Health and Human Services, April 12, 2021. Available at <https://aspe.hhs.gov/reports/medicaid-churning-continuity-care>.

Appendix A: Methodology and Data Limitations

This report expands on MACPAC’s analysis of 2018 enrollment data from TAF data. This appendix outlines the data used and how the analysis was conducted. Most of the methods used mirror those used in MACPAC (2021).

Data source

We used version 7 of the 2017, 2018, and 2019 TAF Research Identifiable Files (RIF) for this analysis. TAF RIF files for later years were available for the analysis, but we did not want to analyze data from the early years of the COVID-19 pandemic when Medicaid enrollment patterns were meaningfully disrupted.

The T-MSIS source eligibility data are converted into a research-ready Demographic and Eligibility TAF, which summarizes the monthly data submissions into one annual beneficiary record to track enrollment and changes in enrollment status over each year. Additionally, a federally assigned unique beneficiary identifier (BENE ID) was included in the file, which makes it possible to track enrollment across states, years, and distinct enrollment periods.

State inclusion criteria

We created data quality thresholds to remove states from the analysis that have a significant amount of missing or inaccurate data that could potentially produce inaccurate and misleading continuous enrollment and churn metrics. These thresholds were based on those used in the T-MSIS Data Quality (DQ) Atlas developed by the Centers for Medicare & Medicaid Services.⁸ Overall, 42 states and the District of Columbia were included in all analyses. We also excluded Puerto Rico and the United States Virgin Islands from the analysis.

We removed eight states from the analyses because of incomplete data (Table A.1). In three states (Utah, Nebraska, and Mississippi), total Medicaid and CHIP enrollment appeared to be underreported by more than 10 percent based on an external benchmark. In one state (Oregon), more than 10 percent of

Table A.1. States excluded from the enrollment and churn analyses

Data quality measure	States excluded
Total Medicaid and CHIP enrollment	Utah, Nebraska, and Mississippi underreported enrollment by greater than 10 percent.
Eligibility group code	Oregon was missing the eligibility group code for 12 percent of eligibility records.
Number of enrollment spans	Oklahoma reported 5 percent of beneficiaries with three or more enrollment spans in 2018 and 2019.
Number of enrollment spans	Oklahoma reported 5 percent of beneficiaries with three or more enrollment spans in 2018 and 2019. Utah reported 28 percent of beneficiaries with one enrollment span in 2018. Wyoming, Kentucky, and Florida reported greater than 99.5 percent of its beneficiaries with only one enrollment span in 2017 or 2018.

beneficiaries were missing an eligibility group code. Finally, in five states (Florida, Kentucky, Oklahoma, Utah, and Wyoming), MACPAC observed an unusual number of enrollment spans per year, a potential indicator of inaccurate reporting of enrollment start and end dates. Overall, the 42 states and the District of Columbia included in this analysis represent 89 percent of Medicaid enrollment nationally in 2018.

Beneficiary exclusion criteria

For states with complete data, we narrowed the population of interest to children and working-age adults who had full benefits and an eligibility group code indicating disability-related eligibility. Consequently, we excluded beneficiaries enrolled in Medicare savings programs, emergency Medicaid, CHIP, or pregnancy-only benefits.

We also excluded beneficiaries who were age 65 or older, not from a disability-related eligibility group, or missing an eligibility group code. Finally, we excluded beneficiaries who were enrolled in multiple states during the study period because 12-month continuous eligibility policies do not apply in these cases.

Of the 85 million unique records in T-MSIS for the states that met our inclusion criteria, we included 7,534,829 in the study before restricting to beneficiaries with enrollment spans in 2018.

Calculating length of enrollment spans

We used the federally assigned BENE ID, the unique beneficiary identifier in T-MSIS, to combine multiple years of data for this analysis because it can be used to identify unique beneficiaries and track their enrollment over time and across states. Using the BENE ID provides a more accurate picture of enrollment spans over time and across states than if only using state-specific Medicaid Statistical Information System (MSIS) ID. However, BENE IDs cannot always be linked to MSIS IDs, so BENE IDs were used for all beneficiaries who had this identifier.

We focused the analyses on beneficiaries enrolled in 2018. To identify the length of enrollment spans for enrollees, we looked back to 2017 to measure whether beneficiaries had at least 12 months of coverage and forward to 2019 to identify whether beneficiaries who disenrolled in 2018 later re-enrolled with 12 months.

We used the start and end dates of enrollment to calculate the exact date range for each enrollment span. To calculate the number of months that a beneficiary was enrolled, enrollment spans were counted in days and divided by 30.4 to convert each span to a month equivalent.

Endnotes

¹ Some Medicaid beneficiaries who qualify for coverage based on their Modified Adjusted Gross Income only may also have a disability. However, it can be difficult to determine the disability status of Medicaid beneficiaries using Medicaid claims data only. Consequently, our analysis focuses on Medicaid beneficiaries whose Medicaid eligibility was disability related.

² Medicaid also provides coverage to adults ages 65 and older who have limited income and assets. Eligibility for this group does not depend on disability-related criteria, so we exclude this group from our analysis.

³ In 2022, substantial gainful activity amounts are \$1,350 per month for nonblind recipients and \$2,260 per month for blind recipients (Social Security Administration, 2022c).

⁴ To be eligible for SSI, non-blind children must have “a medically determinable physical or mental impairment or impairments which result in marked and severe functional limitations” that is expected to last at least 12 months or end in death (Social Security Administration, 2022d).

⁵ The 209(b) states are Connecticut, Hawaii, Illinois, Minnesota, Missouri, New Hampshire, North Dakota, Oklahoma, Virginia.

⁶ Our population of interest—containing 45,610 more children and 93,585 more working-age adults—was also larger than MACPAC (2021) because we did not exclude certain groups of Medicaid beneficiaries whose eligibility was not solely based on their Modified Adjusted Gross Income.

⁷ The SSI eligibility statistics exclude recipients who died or reached age 65 and consequently stopped receiving SSI payment because of their disability status.

⁸ DQ Atlas is available at <https://www.medicaid.gov/dq-atlas/welcome>.