Intellectual and Developmental Disabilities

National Profile of Adult SSI Recipients with Autism or Intellectual Disability in Medicaid
--Manuscript Draft--

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Abstract

This study uses 2019 national Medicaid data to examine Supplemental Security Income (SSI) recipients, focusing on working-aged beneficiaries with autism or intellectual disabilities (ID). Our findings reveal higher-than-average SSI participation among these groups, with a significant concentration of transition-aged recipients (18-25 years). Notably, outpatient psychiatric services were more commonly used by SSI recipients, despite overall similar service utilization between recipients and non-recipients. Automatic enrollment states have higher SSI participation compared to states requiring separate applications, particularly in those with more restrictive Medicaid eligibility criteria, suggesting that the absence of SSI recipients not enrolled in Medicaid from the data may bias results. These insights emphasize the need for targeted policy interventions to better address the unique needs of this population.

Keywords: Medicaid, Supplemental Security Income, Autism, Intellectual Disability

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Background

The Supplemental Security Income (SSI) program provides monthly cash payments to financially disadvantaged individuals with disabilities (Social Security Administration, n.d.-a). Since its inception in 1974, SSI has become one of the largest federal welfare programs in the United States. In 2015, nearly 1.2 million working-aged adults with autism spectrum disorder (ASD) or intellectual disability (ID) received federal SSI benefits at an annual cost of approximately $7.7 billion (Anderson et al., 2020). Despite modest annual benefits averaging about $6,400 per person, recipients rely on these funds for essentials like food, shelter, and medication (Anderson et al., 2020). Moreover, the SSI program often serves as a pathway to healthcare, as many states automatically enroll SSI recipients in Medicaid (Rupp et al., 2008). Some states (Section 1634) automatically enroll SSI recipients into Medicaid, eliminating the need for a separate application, while others (Section 209(b)) impose stricter eligibility criteria, potentially limiting Medicaid access for SSI recipients (Medicaid and CHIP Payment and Access Commission [MACPAC], 2019). Of the 8.4 million non-elderly Medicaid beneficiaries with functional disabilities in 2019, about 3.2 million (41 percent) received SSI (Musumeci & Orgera, 2021). However, detailed knowledge about the specific subpopulation of Medicaid beneficiaries with autism or ID who may receive SSI is lacking. Without a comprehensive understanding of their prevalence, healthcare utilization, and expenditures, it is challenging to project costs or plan effectively. Thus, this study used 2019 national Medicaid data to explore the prevalence, population characteristics, and health service outcomes of Medicaid beneficiaries with autism or ID who may receive SSI. Additionally, we estimated the national and state-level

prevalence of SSI receipt among working-age Medicaid beneficiaries with autism only, ID-only, or both ASD+ID.

Administered by the Social Security Administration (SSA), SSI is a federally funded program that disburses monthly cash payments to qualifying individuals with disabilities (Social Security Administration, n.d.-b). In 2019, the maximum federal SSI payment was $771 per month for individuals and $1,157 for couples (Social Security Administration, n.d.-b). Several states also supplement federal benefits with state-funded SSI payments through State Supplementary Payment (SSP) programs. These programs allow states to provide cash payments to individuals who may not qualify for SSI due to their income or assets exceeding federal limits. In 2019, 44 states and the District of Columbia provided optional state-funded SSI supplements (Social Security Administration, 2020). Eligibility for SSI requires that working-age adults meet federally defined income and asset standards and fulfill categorical disability criteria. Assets were capped at $2,000 for individuals and $3,000 for couples, and monthly income could not exceed the federal SSI payment plus any state supplements in 2019 (Social Security Administration, 2020). Furthermore, applicants for SSI must have a medically determined physical or mental disability expected to last at least 12 months or result in death and significantly limit their ability to engage in substantial gainful activity, defined as monthly earnings of at least $1,220 in 2019 (Social Security Administration, 2020). Due to the SSA's strict disability determination rules, not all people with disabilities qualify for SSI.

Some SSI recipients may automatically qualify for Medicaid, which provides a broad range of medical services such as hospital care, doctor visits, long-term care, and preventive health services to eligible low-income individuals and families, including those with disabilities (Social Security Administration, n.d.-c). While SSI eligibility criteria are federally defined, states

have some flexibility in Medicaid enrollment policies. Many states align their Medicaid income and asset limits with those of SSI and often use SSI's disability criteria for long-term care eligibility. While most SSI recipients meet Medicaid eligibility automatically, enrollment isn't always direct; some states require a separate Medicaid application even if recipients qualify based on SSI standards (Social Security Administration, 2024). Typically, states use one of three methods to manage Medicaid coverage for SSI recipients: 1) Section 1634 states automatically enroll SSI recipients without a separate application; 2) "criteria states" require a separate application despite automatic eligibility; 3) Section 209(b) states impose stricter eligibility criteria than SSI, potentially limiting enrollment. This variation can affect the number of Medicaid beneficiaries who may receive SSI and lead to differences in Medicaid expenditures across states. In 2019, 33 states offered automatic enrollment, whereas 18 required a separate application, including seven criteria states and the rest as 209(b) states (MACPAC, 2019).

Policymakers are particularly interested in the subgroup of Medicaid beneficiaries who also receive SSI due to their significant healthcare needs and associated higher costs compared to non-recipients (Levere & Wittenburg, 2023). Recent analyses indicate a rise in SSI enrollments among working-age adults with autism and/or ID (Anderson et al., 2020). National SSA program data reveal a 336.6% surge in autistic awardees from 2005 to 2019. In contrast, there was a 44.5% decrease in recipients with ID during the same period (Anderson et al., 2022). Despite these findings, there is notable state-level variability in the demographic size of this population, and it is still uncertain if these trends continue within the Medicaid-eligible subgroup. Moreover, there is a scarcity of focused research on the healthcare outcomes of working-age adults with autism or ID, despite their high service requirements.

The purpose of this study is to deepen the understanding of the specific subpopulation of working-age Medicaid beneficiaries who may receive SSI, with a particular focus on those diagnosed with autism or ID. Leveraging 2019 national Medicaid claims data, our objective was to delineate the population characteristics and health service outcomes of these beneficiaries, examining how possible SSI enrollment influences their healthcare patterns and resource utilization. Specifically, we aimed to:

1) Examine sociodemographic and healthcare profiles of working-age Medicaid beneficiaries with ASD-only, ID-only, or ASD+ID, distinguishing those who receive SSI.

2) Identify factors correlated with SSI receipt among this population.

3) Explore variability of SSI receipt across states.

This study contributes to the knowledge base on Medicaid beneficiaries who may receive SSI in several key ways: (1) it utilizes recent data, offering a current national snapshot of this population; (2) it examines subgroup differences within broader ASD and ID disability groupings; (3) it includes a comparative analysis of non-recipients, allowing for a clearer assessment of the distinct needs of SSI recipients; and (4) it investigates prevalence of SSI receipt at the state-level to assist policymakers in pinpointing geographic regions that may need targeted resource allocation.

Methods

We used national data from the 2019 Transformed Medicaid Statistical Information System (T-MSIS) Analytic Files (TAF) to assess demographic variations and health service outcomes by SSI receipt and disability group (ASD-only, ID-only, and ASD+ID). Maintained by the Centers for Medicare & Medicaid Services (CMS), T-MSIS compiles individual-level

enrollment, eligibility, claims, and service utilization data from all 50 states, supporting large-scale analyses of Medicaid populations. Access is limited to approved researchers and policymakers through CMS. This study received expedited approval from the [blinded for peer review] Institutional Review Board.

Study Population

The TAF personal summary and demographic eligibility (DE) files include data for beneficiaries in Medicaid or Children's Health Insurance Program (CHIP) across all 50 states and DC (Centers for Medicare & Medicaid Services, n.d.). All 50 states and the District of Columbia were included in this analysis. No states were excluded based on data quality concerns, as completeness thresholds met CMS recommendations (DQ Atlas, 2021 Release 1; CMS, 2021). We focused on working-age adults (18-64 years) enrolled in Medicaid for at least nine months in 2019 to address administrative churning. Disability groups were defined as: (1) ASD-only (ASD without ID), (2) ID-only (ID without ASD), and (3) ASD+ID (both ASD and ID). Approximately 30-50% of autistic individuals also have an ID diagnosis (Baio et al., 2018; Maenner, 2023). The sample was drawn from a cohort of ASD/ID individuals identified using the Chronic Conditions Warehouse validated algorithm between the years of 2008-2019 (Centers for Medicare & Medicaid Services, 2025). The algorithm requires one inpatient or two other (non-drug) claims with a diagnosis associated with autism spectrum disorder (ICD-9 codes 299.xx or ICD-10-CM F84.x) or intellectual disability (ICD-9 codes 317.xx – 319.xx or ICD-10-CM F70-F79). (Burke et al., 2014; Centers for Medicare & Medicaid Services, 2023). The final sample included 1,216,093 beneficiaries: 19.5% ASD-only, 61.3% ID-only, and 19.2% ASD+ID.

Measures

SSI Receipt

Cases from our sample who received SSI for at least nine months in 2019 were classified as SSI recipients. Those who did not receive SSI at any point during 2019 were included in the non-SSI group. We excluded cases who received SSI for less than nine months.

Sociodemographic Characteristics

We considered age, sex, and region of residence, established by the US Census Bureau (Northeast; Midwest; West; South; U.S. Census Bureau, n.d.). Age was categorized as 18-25, 26-29, 30-39, and 40-64 years, with transition-aged young adults defined as those 18 to 25 years. These age groupings are consistent with previous studies examining SSI receipt among working-aged adults with autism or ID (Anderson et al., 2022). Following methodologies from previous studies (Shea et al., 2024) race and ethnicity categories included white, Black, Asian/Pacific Islander, Hispanic/Latino, more than One Race, Native Indian/Alaska Native, and Missing (5.0%-18.4% across groups). Insurance type was classified as either fee-for-service/primary care case management (FFS/PCCM) or any comprehensive managed care (CMC). Dual Medicare included cases who were dually eligible for Medicaid services during the study period.

Healthcare Use and Expenditures

Following methodologies from previous studies (Shea et al., 2018), we constructed annual measures of healthcare expenditures for OP, IP, and long-term care (LTC) services, categorized as either medical or psychiatric. Expenditures represented the amount reimbursed by the insurance system to providers. Medicaid expenditures are tracked through fee-for-service (FFS) claims, while managed care payments follow capitation models, which often lack standardized, claim-level cost data. Although expenditure data for CMC enrollees is not always directly available, recent research suggests increasing comparability between FFS and CMC expenditures over time (Samples et al., 2025). However, limitations remain due to state-level

variations in reporting and proprietary capitation formulas used by CMC plans. To improve transparency, our analyses focus on FFS claims while acknowledging that they may not fully capture expenditures for Medicaid beneficiaries in managed care.

State Medicaid Enrollment Policies

We categorized states based on their geographic census regions and the methods used to extend Medicaid coverage to SSI recipients in 2019 (i.e., 1639, "criteria states", and 209(b)). States with automatic enrollment (or 1634 states) included: Alabama, Arizona, Arkansas, California, Colorado, DC, Delaware, Florida, Georgia, Iowa, Kentucky, Louisiana, Maine, Maryland, Massachusetts, Michigan, Mississippi, Montana, New Jersey, New Mexico, New York, North Carolina, Pennsylvania, Rhode Island, South Carolina, South Dakota, Tennessee, Texas, Vermont, Washington, West Virginia, Wisconsin, and Wyoming. States that required a separate application for Medicaid but use the same eligibility criteria used in determining eligibility for SSI (or "criteria states") included: Alaska, Idaho, Kansas, Nebraska, Nevada, Oregon, and Utah. States with more restrictive eligibility criteria for Medicaid than for SSI (or 209(b) states) included: Connecticut, Hawaii, Illinois, Indiana, Minnesota, Missouri, New Hampshire, North Dakota, Ohio, Oklahoma, and Virginia (MACPAC, 2019).

Analysis

For Aim 1, descriptive statistics compared SSI and non-SSI recipients' characteristics and detailed healthcare use/expenditures by service type (OP, IP, LTC). We calculated the proportion of users without expenditures and reported average and median costs among those with costs. For Aim 2, multivariate logistic regression assessed adjusted odds of SSI receipt, controlling for disability, demographics, and healthcare variables, with separate models for all states, 1634 states, criteria states, and 209(b) states. For Aim 3, state-level SSI prevalence was calculated as

the proportion of SSI recipients among Medicaid beneficiaries, both overall and by disability

group. Z-scores identified significant deviations from the mean, with no standard errors reported

due to the use of complete population data (Gibbs et al., 2017).

Results

Table 1 shows that 681,748 beneficiaries with autism or ID received SSI in 2019: 117,953

had ASD-only, 419,872 had ID-only, and 143,923 had both ASD and ID. The highest SSI receipt

rate was among the ASD+ID group (64.0%), compared to ASD-only (51.7%) and ID-only

(58.0%).

Sociodemographic Characteristics

SSI recipients were more likely to be Black, Indigenous, and People of Color (BIPOC)

and reside in the South, regardless of disability type (Table 1). Most SSI recipients were

transition-aged, particularly in the ASD-only (60.8%) and ASD+ID (44.5%) groups, compared to

ID-only (20.8%). SSI recipients predominantly had comprehensive managed care (CMC), with

lower enrollment in FFS/PCCM, particularly for ID-only. ASD-only recipients were least likely

to have dual Medicare eligibility.

Healthcare Use and Expenditures

Among SSI recipients, outpatient (OP) medical and psychiatric services were most used,

while medical long-term care (LTC) was least used (Table 2). OP psychiatric service use was 5.2

percentage points higher for ASD-only recipients compared to non-recipients. ID-only recipients

used inpatient (IP) and medical services most frequently, while ASD+ID recipients had the

highest use of psychiatric services (90.0%) compared to ID-only (76.8%) and ASD-only

(70.5%). SSI recipients generally had higher median costs for IP and OP medical services but

lower costs for OP psychiatric and LTC services than non-recipients. Differences were most

pronounced for ID-only recipients, with IP medical service costs nearly four times higher for SSI recipients and OP medical service costs twice as high. Expenditure differences for OP psychiatric services were greatest among ASD-only recipients. Median expenditures were lower than means across all groups, reflecting a skewed distribution toward lower costs.

Correlates of SSI Receipt

Table 3 presents multivariate models predicting SSI receipt by state Medicaid eligibility. ASD-only individuals consistently had lower odds of SSI receipt than ID-only (ORs 0.48–0.81). ASD+ID individuals had higher odds in most models, except 209(b) states (OR = 0.92). Adults aged 26–39 had higher odds of SSI receipt than those aged 18–25 (ORs 1.14–1.68) . Black and Hispanic/Latino individuals had higher odds of SSI receipt, but these were reduced in criteria and 209(b) states. Regional differences showed lower odds in the Midwest and Northeast compared to the South. Dual Medicare beneficiaries had lower odds of SSI receipt. Psychiatric service utilization was associated with higher odds of SSI receipt, while medical service utilization had small to moderate effects.

State-Level Variation

Figure 1 and Table 4 detail state-level SSI receipt rates among working-age Medicaid beneficiaries with autism or ID. On average, 51% (*SD* = 23.3%) received SSI across states, with state rates ranging from 6.1% in Oregon to 91.8% in Idaho. On average, across all states, beneficiaries with ASD+ID had the highest rates of SSI receipt, followed by those with ASD-only and then those with ID-only. States with automatic Medicaid enrollment (1634 states) had higher SSI receipt rates on average (*M* = 54.5%, *SD* = 19.3%) compared to criteria (*M* = 37.3%, *SD* = 25.5%) and 209(b) states (*M* = 42.3%, *SD* = 23.7%).

Discussion

This study analyzed 2019 national Medicaid data to examine the characteristics and healthcare service utilization of Medicaid beneficiaries who may receive SSI, focusing on individuals with autism or intellectual disabilities. Among all disability groups, over 50% of Medicaid beneficiaries received SSI, surpassing the national estimate of 41% for Medicaid beneficiaries with functional disabilities (Musumeci & Orgera, 2021). These findings highlight Medicaid and SSI's critical role in supporting financially vulnerable adults with autism or ID.

Medicaid beneficiaries who receive SSI recipients are predominantly younger and often transition-aged compared to non-recipients. This age disparity may account for the differences in dual Medicare eligibility between groups, which is linked to lower odds of SSI receipt. These findings align with recent national data, emphasizing an uptick in transition-aged SSI awardees among autistic adults, in stark contrast to the lower rates observed among those with ID (Anderson et al., 2022). Moreover, Anderson et al. (2022) reported that approximately 90.0% of new adult SSI awardees with autism were between 18 and 25 years old. Transition-age is a critical focus for policymakers, especially concerning SSI-related programs (Bertoni, 2017). Research indicates that individuals who begin receiving SSI before turning 30 are prone to prolonged unemployment despite having work-related goals (Ben-Shalom & Stapleton, 2015; Livermore et al., 2020). In response, numerous legislative and programmatic initiatives have been developed to enhance outcomes for transition-aged SSI recipients, including those with disabilities (Social Security Administration, 2023). In essence, the significant proportion of transition-aged recipients in our study underscores the critical need for targeted assistance during this pivotal developmental stage, highlighting the unique opportunities to positively influence the trajectory of adult life for this demographic. Age-related differences in Medicaid service use may reflect historical shifts in ASD/ID diagnosis and service access, as ASD-specific Medicaid

programs primarily target children, potentially affecting service expenditures in adulthood (Baio et al., 2018; Maenner et al., 2023).Dual Medicare eligibility was less common among beneficiaries who may receive SSI compared to non-recipients across all disability groups. One possible reason why nonelderly adult SSI recipients with autism or ID were less likely to be dually eligible for Medicare than their non-recipient counterparts, is ineligibility for Social Security Disability Insurance (SSDI) benefits. Medicare eligibility for nonelderly adults typically depends on receiving SSDI benefits for a certain period, and many younger SSI recipients may lack the necessary work history and credits to qualify for SSDI and consequently, Medicare. Evidence from the broader population of working-age adults indicate high rates of cross-participation, with an estimated thirty-four percent of SSI recipients also receiving SSDI benefits (Social Security Administration, 2023). Yet less is known about the subgroup of recipients with autism or ID. Future research should investigate the extent of cross-participation in SSDI and its effects on service utilization and outcomes.

Medicaid beneficiaries who receive SSI did not utilize healthcare services at higher rates than non-recipients, contrary to expectations. This could be due to a lack of awareness about available services or difficulties in navigating the healthcare system, compounded by socio-economic challenges like unstable housing, food insecurity and transportation that often disrupt continuity of care. These factors underscore the necessity for targeted interventions that not only provide financial support but also facilitate access to healthcare services. Moreover, the younger age profile of SSI recipients in our sample may correlate with better health, resulting in lower-than-expected service utilization (Jariwala-Parikh et al., 2019). Expenditure differences across disability groups may reflect changes in diagnostic criteria and service availability. Older adults with ASD likely had fewer early interventions, while Medicaid-funded ASD programs primarily

serve children (Baio et al., 2018; Maenner et al., 2023). A deeper analysis of how the healthcare system interacts with social support programs and addresses the specific challenges faced by SSI recipients is essential. Such insights are crucial for developing more effective interventions and policies to ensure adequate care for this vulnerable population.

The predominance of CMC among SSI recipients may reflect broader Medicaid policy shifts, including increasing reliance on CMC to deliver services and contain costs. States may also auto-enroll SSI recipients into managed care, especially in urban areas with more low-income and racially diverse populations. Disproportionate enrollment of BIPOC individuals in SSI may reflect structural inequities such as delayed diagnosis, service navigation barriers, and inconsistent outreach. These patterns raise equity concerns and highlight the need for further research on the intersection of race, disability, and managed care participation.

Distinct patterns of healthcare utilization emerged across disability groups, challenging previous assumptions. Medicaid beneficiaries with ID-only had the highest medical service utilization, with expenditures for IP and OP services nearly four and two times higher, respectively, than those without ID. Recipients with ASD+ID did utilize OP psychiatric and LTC psychiatric services more frequently than other groups, aligning with prior findings (Rubenstein & Bishop, 2019). The higher psychiatric service use and related expenditures could be linked to the co-occurring medical conditions, behavioral challenges, and communication difficulties common to both autism and ID (Bishop-Fitzpatrick & Rubenstein, 2019; Schott et al., 2022; Vohra et al., 2017). In contrast, those with only autism had the lowest usage rates and expenditures across all service types, except IP medical services, suggesting fewer functional impairments requiring continuous support (Rubenstein & Bishop, 2019). These variations likely reflect differences in medical need and service access within Medicaid, with ID beneficiaries

more likely to require chronic condition management, while those with autism may engage more with behavioral health and developmental services. A more detailed assessment within both OP and IP settings is essential to better understand these utilization patterns and guide targeted interventions.

States varied considerably with regards to the proportion of beneficiaries who received SSI in 2019, both across and within US Census regions. These findings mirror those in extant research (Anderson et al., 2022; Ben-Shalom & Stapleton, 2014). SSI receipt was most common in the South, likely due to the high prevalence of 1634 states, which automatically enroll SSI recipients into Medicaid. In contrast, in states requiring a separate Medicaid application or imposing stricter eligibility criteria under Section 209(b), fewer Medicaid beneficiaries were enrolled in SSI. This indicates that the exclusion of SSI recipients not enrolled in Medicaid from our dataset may influence the results in non-1634 states. This finding is similar to those from analyses of SSA program data, which observed lower Medicaid participation rates among nonelderly SSI recipients in separate-application and more restrictive states than those with automatic enrollment (Rupp & Riley, 2016). It is also true, however, that other state-level influences like socioeconomic conditions, political climate, disability prevalence, welfare caseload composition and policies, the efficiency and effectiveness of state agencies in processing SSI and Medicaid applications, state budget constraints and priorities, and whether a state has chosen to expand Medicaid under the Affordable Care Act (Gettens et al., 2018; Hemmeter et al., 2017; Parolin & Luigjes, 2019). This variability underscores the potential impact that state policies regarding Medicaid enrollment have on the accessibility of benefits for this vulnerable population, emphasizing the need for policy considerations that enhance support

accessibility. Further research aimed at identifying and delineating state-level factors that affect SSI receipt is needed.

Limitations

This analysis only includes Medicaid beneficiaries, excluding SSI recipients who are not enrolled in Medicaid in non-1634 states. This limits our ability to assess SSI uptake in these states comprehensively, as our estimates reflect only those who receive both SSI and Medicaid. Further, the data may not reliably identify all SSI recipients, as it excludes adults who received no services or were enrolled in Medicaid for less than nine months during 2019. More research is needed to evaluate SSI receipt among the broader population of SSI recipients in these states. Second, the diagnoses of autism or ID were determined using ICD codes, not direct assessments, potentially leading to misclassification within our sample. Third, our dataset only covers 2019, the latest available year at the time of the study, which may not reflect current practices and could limit the generalizability of our results. Fourth, despite improvements in the timeliness and quality of the TAF dataset, variations in data accuracy and completeness persist across states (Center for Medicaid and Medicare, n.d) and socioeconomic factors such as income and household structure are not included (Saunders & Chidambaram, 2022). We also rely on FFS data to examine healthcare expenditures, acknowledging that CMC payments operate under capitation models, limiting direct expenditure comparisons. While FFS expenditures serve as a benchmark for tracking service utilization and cost patterns, they may not fully reflect costs in CMC systems. Given the dynamic nature of Medicaid delivery models, future research should explore ways to enhance expenditure comparability across FFS and CMC populations, including tracking cost variations over shorter time frames and improving transparency in CMC reporting.

Despite these limitations, our study utilizes comprehensive national claims data to address key methodological gaps in existing research on SSI receipt among working-age Medicaid recipients, thereby reducing biases often present in survey-based program participation data and enhancing the accuracy of our findings (Meyer et al., 2022; Stapleton et al., 2012). State policymakers can use these insights to better understand and support their Medicaid populations with autism or ID, particularly in identifying and assisting underserved subgroups. Moreover, our data highlights the necessity of monitoring service use and costs across different diagnostic groups due to their diverse service profiles. Additionally, our findings are informative for states contemplating more restrictive Medicaid/SSI enrollment policies. They provide a baseline for evaluating the impacts of the Families First Coronavirus Response Act (FFCRA; United States Congress, 2020) and the Coronavirus Aid, Relief, and Economic Security (CARES) Act (United States Congress, 2020b). These acts' continuous enrollment provisions, which prevented disenrollment from Medicaid during the COVID-19 public health emergency, function similarly to the "1634" state requirement that automatically enrolls SSI recipients in Medicaid. Comparing these approaches can offer valuable insights into the effects of administrative simplifications on Medicaid enrollment and healthcare continuity. As the prevalence and complexity of adult beneficiaries with autism or ID continue to increase (Rubenstein et al., 2023), vigilant monitoring and targeted policy adjustments are crucial to address their evolving needs. This ongoing focus is crucial for enhancing access to care and improving life outcomes for this vulnerable segment of the population.

Conclusion

This study provides a national analysis of SSI receipt among Medicaid beneficiaries with autism or ID, highlighting demographic and healthcare differences between those who receive

SSI and those who do not. Findings emphasize the importance of Medicaid as a primary safety net for this population and the need for targeted policy efforts, particularly for transition-aged beneficiaries. Significant state-level variability in SSI receipt may reflect differences in the ability to observe non-Medicaid SSI recipients in non-1634 states, highlighting the need for future research on policy-driven enrollment disparities. Ultimately, this research deepens our understanding of Medicaid beneficiaries with autism or ID who may receive SSI and identifies key factors influencing program participation. Findings underscore the role of state policies in shaping program accessibility and advocate for strategies that enhance Medicaid and SSI coordination to better support adults with autism or ID.

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Figure 1 Description

Figure 1.

Proportion of beneficiaries who receive SSI by state among working-age adults with autism or ID, 2019

Note: State Groupings of US Census Regions and (divisions) are as follows: NORTHEAST - (New England) CT, MA, ME, NH, RI, VT (Mid Atlantic) NJ, NY, PA ; MIDWEST - (East North Central) IN, IL, MI, OH, WI (West North Central) IA, KS, MN, MO, ND, NE, SD; SOUTH - (South Atlantic) DC, DE, FL, GA, MD, NC, SC, VA, WV (East South Central) KY, MS, TN (West South Central) AR, LA, OK, TX ; WEST - (Mountain) AZ, CO, MT, NM, NV, UT, WY (Pacific)AK, CA, HI, OR, WA.

State Medicaid Enrollment Policies are as follows: 1634 STATES (automatic enrollment) - AL, AZ, AR, CA, CO, DE, DC, FL, GA, IN, IA, KY, LA, ME, MD, MA, MI, MS, MT, NJ, NM, NY, NC, OH, PA, RI, SC, SD, TN, TX, VT, WA, WV, WI, WY; CRITERIA STATES (separate application/nonrestrictive) - AK, ID, KS, NE, NV, OK, OR, UT ; 209(b) STATES (separate application/restrictive) - CT, HI, IL, MN, MO, NH, ND, VA.

Figure 1

Washington DC

National Average: 50.1% (SD=23.3%)

Percentage of total Medicaid beneficiaries with ASD or ID who receive SSI

0 - 25%

26 - 49%

50 - 74%

75 - 100%

Table 1   Click here to access/download;Table;Table 1.docx ±
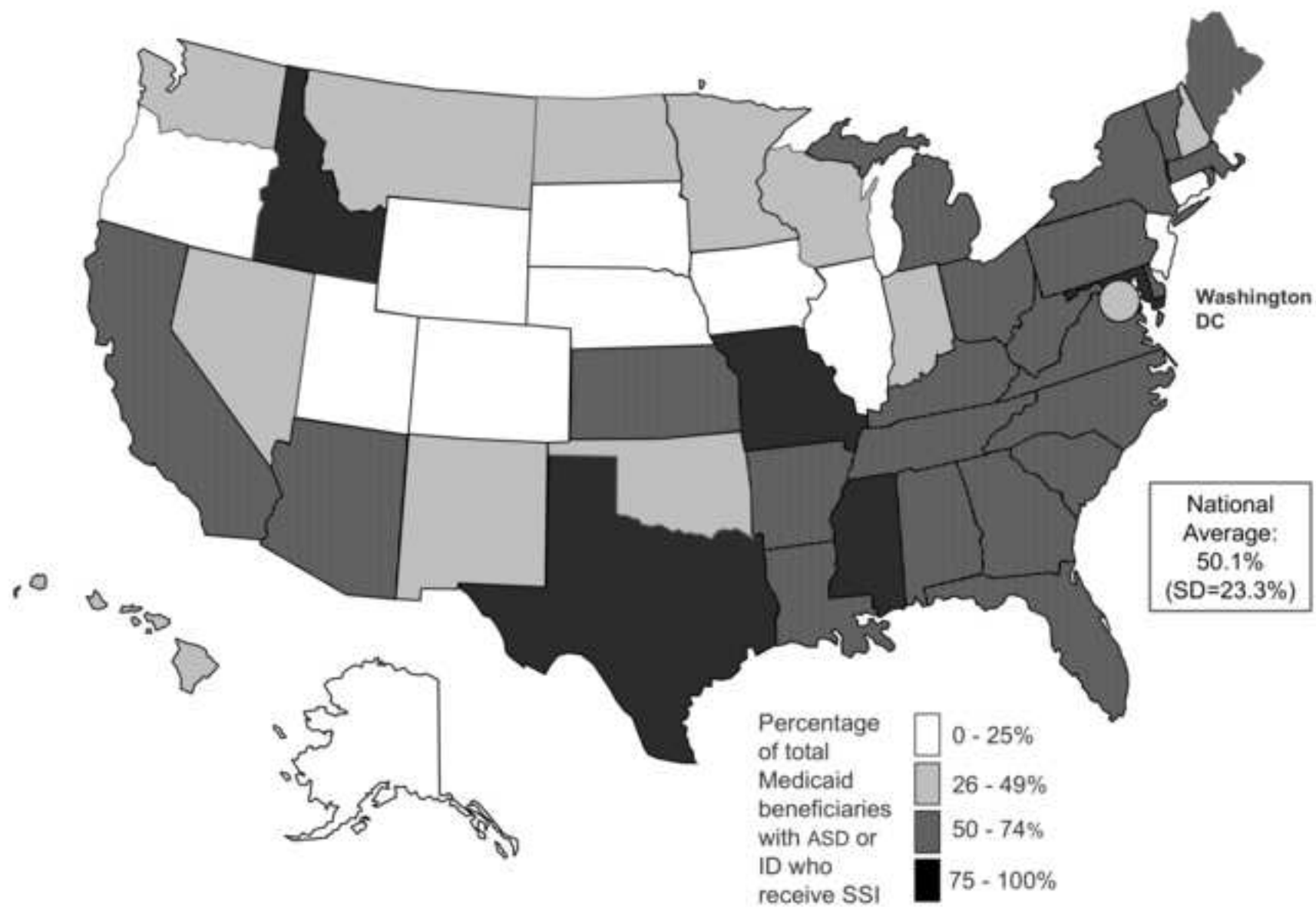
Table 1

Characteristics of working-age Medicaid beneficiaries in 2019, by SSI enrollment and group (%).

Sample Characteristics	ASD-only (*n*=228,153)		ID-only (*n* =723,307)		ASD+ID (*n* = 224,785)	
	SSI	No SSI	SSI	No SSI	SSI	No SSI
	(*n*=117,953)	(*n*=110,200)	(*n*=419,872)	(*n*=303,435)	(*n*=143,923)	(*n*=80,862)
Age						
18-25	60.8%	61.5%	20.8%	15.1%	44.5%	30.4%
26-29	17.4%	12.5%	13.4%	7.8%	19.0%	13.0%
30-39	14.6%	14.9%	26.1%	20.6%	22.2%	23.0%
40-64	7.3%	11.1%	39.7%	56.5%	14.4%	33.5%
Male	77.5%	73.0%	52.4%	53.3%	71.9%	71.4%
Race/ethnicity						
white	50.3%	65.5%	47.8%	66.3%	50.9%	68.2%
Black	13.5%	11.3%	23.5%	16.8%	20.1%	15.2%
Asian/Pacific Islander	2.7%	2.7%	3.2%	2.2%	3.4%	2.4%
Hispanic/Latino	13.1%	10.7%	14.2%	8.4%	12.8%	7.3%
More than One Race	1.0%	0.5%	0.5%	0.3%	0.7%	0.4%
Native Indian/AK	0.8%	1.1%	0.8%	1.1%	0.6%	0.8%
Missing	18.7%	8.3%	10.0%	4.9%	11.5%	5.7%
Region						
Midwest	19.6%	27.9%	21.1%	32.1%	21.3%	30.3%
Northeast	17.4%	26.9%	20.3%	26.3%	25.0%	31.0%
South	40.0%	19.3%	36.9%	23.3%	35.6%	21.0%
West	23.0%	25.9%	21.7%	18.3%	18.1%	17.7%
Dual Medicare	20.4%	22.9%	37.5%	70.1%	27.4%	64.2%
Insurance type[a]						
FFS/PCCM only	8.8%	13.4%	20.4%	30.1%	24.5%	30.4%
Any CMC	91.2%	86.6%	79.6%	69.9%	75.5%	69.6%

Abbreviations: AK, Alaska Native; ASD, autism spectrum disorder; ID, intellectual disability; FFS = fee-for-service; PCCM = primary care case management; CMC = comprehensive managed care.

[a] The most common insurance type is the most common monthly insurance during the study period.

Table 2

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Table 2

Service use and annual expenditures (in dollars) of working-age Medicaid beneficiaries in 2019, by SSI enrollment and group (%).

Service use and expenditures	ASD-Only (n = 228,153)		ID-Only (n = 723,307)		ASD+ID (n = 224,785)	
	SSI	No SSI	SSI	No SSI	SSI	No SSI
	(n=117,953)	(n=110,200)	(n=19,872)	(n=303,435)	(n=43,923)	(n=80,862)
Inpatient						
Psychiatric: % utilized	3.1%	3.4%	4.0%	2.6%	3.6%	2.8%
$0 Expenditures (%)	67.7%	68.4%	63.2%	62.8%	58.5%	61.4%
Expenditures[a] (mean)	8,179	8,674	10,039	6,343	11,079	7,923
SD	9,733	11,183	13,222	9,341	14,847	11,356
Median	4,620	4,534	4,852	2,094	5,478	2,966
Medical: % utilized	3.7%	4.5%	10.0%	10.5%	6.6%	7.6%
$0 Expenditures (%)	63.2%	63.5%	55.1%	52.6%	49.4%	51.4%
Expenditures[a] (mean)	12,278	7,521	13,154	3,656	13,430	3,604
SD	17,299	9,922	19,064	5,333	19,184	5,072
Median	5,617	3,499	5,379	1,364	5,756	1,364
Outpatient						
Psychiatric: % utilized	70.5%	65.3%	76.8%	75.1%	90.01%	88.6%
$0 Expenditures (%)	39.6%	44.5%	22.8%	21.1%	19.4%	17.8%
Expenditures[a] (mean)	10,008	6,649	30,099	34,531	43,019	46,409
SD	16,115	10,878	42,776	47,830	58,185	61,746
Median	2,825	1,745	14,062	16,955	21,078	23,509
Medical: % utilized	79.15%	79.7%	90.0%	89.4%	89.95%	90.0%
$0 Expenditures (%)	47.69%	48.9%	34.1%	25.6%	31.36%	28.2%
Expenditures[a] (mean)	2,536	2,237	5,328	5,470	6,029	7,411
SD	4,909	4,286	10,248	11,798	11,835	16,127
Median	510	474	961	589	1,049	706
Long term care						
Psychiatric: % utilized	0.9%	1.2%	3.9%	7.3%	4.2%	7.4%
$0 Expenditures (%)	48.7%	50.9%	18.8%	16.4%	20.8%	21.3%
Expenditures[a] (mean)	43,568	34,686	100,012	118,315	118,733	141,592
SD	61,453	47,704	80,120	90,741	85,683	114,346
Median	18,097	14,098	79,362	104,033	110,779	116,218
Medical: % utilized	0.4%	0.6%	2.8%	4.6%	0.9%	2.1%
$0 Expenditures (%)	53.1%	42.7%	41.3%	32.7%	32.8%	38.5%
Expenditures[a] (mean)	41,914	49,963	55,193	55,334	66,856	71,757
SD	39,020	49,686	54,933	49,350	75,078	75,057
Median	41,003	44,438	48,419	52,975	46,038	56,354

Abbreviations: ASD, autism spectrum disorder; ID, intellectual disability.

a Expenditures reported among the subset of beneficiaries that reported expenditures > $0

Table 3

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Table 3

Adjusted odds ratios (OR) of SSI receipt among all working-age Medicaid beneficiaries with ASD or ID

in 2019, by state eligibility criteria: Adjusted odds ratios (OR) and 95% confidence intervals.

	All	1634	Criteria	209(b)
Disability Group	OR	OR	OR	OR
ID-only				
ASD-only	ref	ref	ref	ref
ASD+ID	0.52*	0.48*	0.81*	0.67*
Age	1.09*	1.08*	0.92	1.14*
18-25				
26-29	ref	ref	ref	ref
30-39	1.59*	1.68*	1.14*	1.42*
40-64	1.37*	1.41*	0.94	1.24*
Male (vs. female)	0.96*	0.93*	0.75*	1.06*
Race/ethnicity	1.04	1.05*	0.98	1.02
White				
Black	ref	ref	ref	ref
Asian/Pacific Islander	1.44*	1.55*	1.17*	0.91*
Hispanic/Latino	1.47*	1.68*	0.88	1.04
More than One	1.63*	1.81*	0.79*	0.52*
Native Indian/AK	1.81*	2.16*	0.64	0.98
Missing	0.80*	1.05	0.74*	0.95
Region	2.02*	1.97*	1.16	1.12
South				
Midwest	ref	ref	ref	ref
Northeast	0.41*	0.44*	0.61*	0.40*
West	0.42*	0.41*	[]	0.11*
Dual Medicare (vs. no)	0.56*	0.56*	0.81*	0.38*
Insurance type[a]	0.31*	0.24*	0.34*	1.21*
FFS/PCCM only				
Any CMC	ref	ref	ref	ref
Any psychiatric utilized	0.99	0.75*	1.34*	1.96*
Any medical utilized	1.37*	1.34*	1.03	1.59*
	1.01	1.01	1.14*	1.07*

*p<.001

Abbreviations: AK, Alaska Native; ASD, autism spectrum disorder; ID, intellectual disability; FFS, fee-for-service; PCCM, primary care case management; CMC, comprehensive managed care.

Note: Calculated adjusted OR predicting SSI=1; State Medicaid Enrollment Policies are as follows: 1634 STATES (automatic enrollment) - AL, AZ, AR, CA, CO, DE, DC, FL, GA, IN, IA, KY, LA, ME, MD, MA, MI, MS, MT, NJ, NM, NY, NC, OH, PA, RI, SC, SD, TN, TX, VT, WA, WV, WI, WY; CRITERIA STATES (separate application/nonrestrictive) - AK, ID, KS, NE, NV, OK, OR, UT ; 209(b) STATES (separate application/restrictive) - CT, HI, IL, MN, MO, NH, ND, VA.

a The most common insurance type is the most common monthly insurance during the study period.

Table 4

Counts and proportion of working-age beneficiaries with autism or ID who receive SSI, by disability and state.

State	ASD-Only (*n* = 228,153)			ID-Only (*n* = 723,307)			ASD+ID (*n* = 224,785)		
	Number of SSI recipients	SSI recipients as a share of all beneficaries with ASD-only	Z-score	Number of SSI recipients	SSI recipients as a share of all beneficaries with ID-only	Z-score	Number of SSI recipients	SSI recipients as a share of all beneficaries with ASD+ID	Z-score
Alabama	2,610	46.2%	-2.4	8,421	75.4%	0.0	2,130	83.0%	1.1
Alaska	299	32.1%	-6.5	321	22.6%	-0.6	70	14.6%	-1.5
Arizona	2,845	48.3%	-2.0	7,377	63.0%	-0.1	2,917	69.9%	0.6
Arkansas	1,014	68.2%	-5.2	5,841	68.2%	-0.2	1,138	70.12%	0.6
California	16,843	59.8%	23.0	72,281	75.1%	5.0	19,093	82.6%	1.1
Colorado	771	22.5%	-5.6	1,056	13.9%	-0.6	265	11.6%	-1.6
Connecticut	243	6.9%	-6.6	668	6.0%	-0.6	192	6.0%	-1.8
DC	162	58.9%	-6.7	550	26.2%	-0.6	78	19.8%	-1.3
Delaware	165	34.3%	-6.7	1,595	58.1%	-0.5	843	67.7%	0.6
Florida	8,868	76.4%	8.8	10,625	63.2%	0.2	5,806	76.3%	0.9
Georgia	3,632	76.1%	-0.5	10,538	69.4%	0.2	3,343	76.5%	0.8
Hawaii	172	43.1%	-6.7	1,324	45.5%	-0.6	429	60.4%	0.0
Idaho	1,398	85.1%	-4.5	3,009	94.2%	-0.4	1,465	96.0%	1.6
Illinois	942	11.5%	-5.3	7,382	29.2%	-0.1	1,444	23.3%	-1.1
Indiana	2,658	48.3%	-2.3	6,698	43.9%	-0.1	2,829	56.9%	0.0
Iowa	1,182	38.2%	-4.9	1,681	16.5%	-0.5	367	12.5%	-1.5
Kansas	865	59.3%	-5.5	1,016	47.7%	-0.6	220	50.00%	-0.1
Kentucky	1,733	55.7%	-3.9	8,509	75.8%	0.0	3,140	79.3%	1.0
Louisiana	1,855	64.3%	-3.7	7,121	63.5%	-0.1	2,312	77.9%	0.8
Maine	1,123	57.3%	-5.0	2,886	60.4%	-0.4	1,878	72.8%	0.6
Maryland	3,360	72.0%	-1.0	7,682	77.5%	-0.1	2,095	85.4%	1.2
Massachusetts	2,531	44.6%	-2.5	12,161	56.8%	0.3	5,491	67.3%	0.5
Michigan	5,449	51.7%	2.7	18,398	55.1%	0.8	7,487	67.5%	0.5
Minnesota	1,178	20.7%	-4.9	5,827	28.1%	-0.2	3,276	44.2%	-0.4
Mississippi	862	79.2%	-5.5	5,620	74.6%	-0.2	970	75.0%	0.8
Missouri	3,898	73.7%	-0.1	14,500	89.5%	0.5	3,786	87.2%	1.3
Montana	365	35.9%	-6.4	654	35.4%	-0.6	414	54.0%	0.0
Nebraska	278	35.5%	-6.5	630	14.7%	-0.6	106	11.9%	-1.5
Nevada	585	53.6%	-6.0	1,684	45.0%	-0.5	543	41.5%	-0.4
New Hampshire	528	40.9%	-6.1	1,021	59.0%	-0.6	342	10.8%	0.6
New Jersey	2,307	31.6%	-2.9	3,538	22.4%	-0.4	799	25.2%	-1.6
New Mexico	752	45.9%	-5.7	1,357	31.1%	-0.5	283	70.4%	-1.1
New York	7,769	48.7%	6.8	41,159	61.1%	2.6	18,928	72.3%	0.6

State	ASD-Only (n = 228,153)			ID-Only (n = 723,307)			ASD+ID (n = 224,785)		
	Number of SSI recipients	SSI recipients as a share of all beneficaries with ASD-only	Z-score	Number of SSI recipients	SSI recipients as a share of all beneficaries with ID-only	Z-score	Number of SSI recipients	SSI recipients as a share of all beneficaries with ASD+ID	Z-score
North Carolina	4,022	64.0%	0.1	16,121	68.9%	0.6	6,388	74.1%	0.7
North Dakota	175	47.3%	-6.7	570	41.3%	-0.6	207	51.6%	-0.1
Ohio	3,304	48.0%	-1.1	27,490	59.1%	1.5	9,566	71.7%	0.6
Oklahoma	908	49.8%	-5.4	3,178	37.4%	-0.4	875	46.4%	-0.2
Oregon	167	5.1%	-6.7	120	5.9%	-0.6	60	7.3%	-1.7
Pennsylvania	5,008	38.9%	1.9	20,708	54.8%	1.0	7,379	67.8%	0.5
Rhode Island	475	66.4%	-6.2	1,595	59.1%	-0.5	521	66.5%	0.5
South Carolina	871	53.4%	-5.5	8,753	61.6%	0.0	4,907	68.4%	0.6
South Dakota	203	47.7%	-6.7	327	13.8%	-0.6	108	16.7%	-1.3
Tennessee	2,739	66.7%	-2.1	8,210	65.9%	0.0	2,251	73.7%	0.7
Texas	10,658	85.7%	12.0	36,558	77.9%	2.2	9,111	81.4%	1.0
Utah	701	45.0%	-5.8	579	14.3%	-0.6	180	11.5%	-1.6
Vermont	573	59.6%	-6.0	1,476	65.8%	-0.5	430	70.6%	0.6
Virginia	2,917	61.1%	-1.8	10,644	68.1%	0.2	4,248	74.7%	0.7
Washington	2,059	32.6%	-3.4	1,139	21.0%	-0.6	335	16.1%	-1.4
West Virginia	770	57.5%	-5.7	5,073	63.0%	-0.3	1,569	73.7%	0.8
Wisconsin	3,030	52.9%	-1.6	4,027	48.5%	-0.3	1,269	51.1%	-0.1
Wyoming	131	46.6%	-6.8	174	8.4%	-0.6	40	8.9%	-1.6
Total US	**117,953**	**51.7%**		**419,872**	**58.05%**		**143,923**	**64.03%**	
National Average	**2,313**	**50.1%**		**8,233**	**49.1%**		**2,822**	**53.7%**	

Abbreviations: ASD, autism spectrum disorder; ID, intellectual disability.