ASPE ASSISTANT SECRETARY FOR PLANNING AND EVALUATION

OFFICE OF BEHAVIORAL HEALTH, DISABILITY, AND AGING POLICY

ISSUE BRIEF

June 28, 2024

USE OF SUPPORTED EMPLOYMENT IN THE MEDICAID AND CHIP WORKING-AGE POPULATION (2019)

KEY POINTS

- State Medicaid programs have the option to cover supported employment services, but use of these services by the Medicaid population has not been widely studied.
- Using data from 2017-2019 Research Identifiable Files, which are derived from Transformed Medicaid Statistical Information System Analytic Files, this brief identified the number and percentage of Medicaid and Children's Health Insurance Program (CHIP) beneficiaries ages 14-65 who were using supported employment services in 2019. We categorized these service users by beneficiary demographics and state.
- Of 52 million Medicaid and CHIP beneficiaries ages 14-65 in the 47 states we analyzed, fewer than 1.0% had a supported employment service claim in 2019.
- Beneficiaries receiving supported employment services are disproportionately older, male, and White compared with the general working-age population in Medicaid.
- Of the beneficiaries who used supported employment services and had a chronic condition, 61.2% had intellectual and developmental disorders, and 50.8% had a behavioral health condition.

BACKGROUND

Most people want stable employment, but some require more support than others to find and maintain a paid job. Supported employment is an evidence-based approach to helping people with disabilities obtain competitive work in integrated settings (that is, working for a competitive wage in the community with other people that do not necessarily have disabilities) to advance the goal of community living [1]. Several federal and state programs cover supported employment services. The services are typically provided for competitive job placements in integrated settings and might include any of the following: vocational/job-related discovery or assessment; person-centered employment planning; job placement; job development; negotiation with prospective employers; job analysis; modification of job descriptions for individual, training, and systematic instruction; job coaching; benefits support; transportation to job training or planning sessions; career advancement services; and other workplace support services [2].

The Centers for Medicare & Medicaid Services (CMS) provides federal matching funds to states that offer supported employment as an allowable Medicaid service [3].[i] Although states are not required to provide these services as a Medicaid benefit, they may offer the services under different authorities, including 1915(c) Home and Community-Based Service (HCBS) waivers, the 1915(i) HCBS Option, Section 1115 Demonstrations, 1915(b) Managed Care/Freedom of Choice, Section 1915(a), the 1932 State Plan Amendment, and the Money

[i] CMS will provide federal matching funds at the state's federal medical assistance percentage.

Follows the Person (MFP) demonstration [3]. To receive funding, states must obtain CMS approval for the waiver or program demonstration or state plan options, but the state Medicaid programs determine which services to cover. Medicaid programs can offer supported employment services to any beneficiary, but they are often offered to people with disabilities, particularly those with intellectual or developmental disabilities. The services also may be offered to those with behavioral health conditions (either mental or substance use disorders) regardless of disability status. Because each state Medicaid program is unique, coverage of supported employment varies across states. As an allowable Medicaid service, supported employment is typically available only to a small share of the Medicaid population participating in an HCBS program or through a Section 1115 waiver.

Medicaid covers supported employment services only if the services are not made available to Medicaid beneficiaries through another program; Medicaid is the payer of last resort [2].[ii] Nonetheless, Medicaid provides a substantial number of supported employment services, and may work closely with state partners offering. Vocational rehabilitation (VR) services funded by the Rehabilitation Services Administration (RSA), U.S. Department of Education. Medicaid services may be important if there is a need for a fuller set of ongoing, long-term supports required for employment. Although not analyzed here, the RSA's Case Service Report (RSA-11) documents the use of VR services through this program. There is no equivalent report for state Medicaid programs [4].

Little research has been done on the extent to which state Medicaid beneficiaries use supported employment as a Medicaid-funded service. Using claims and enrollment data from the 2019 Transformed Medicaid Statistical Information System (T-MSIS) Analytic Files (TAF) Research Identifiable Files (RIF), we examined the number and percentage of Medicaid and Children's Health Insurance Program (CHIP) beneficiaries using supported employment services and categorized the service users by demographics and state.

METHODS

In our analysis, we relied on the 2017-2019 TAF RIF.[iii] We used the Demographic and Eligibility (DE) file and four claims files: inpatient (IP), long-term care (LT), other services (OT), and pharmacy (RX) files. The DE file includes demographic, eligibility, and enrollment information for all Medicaid and CHIP beneficiaries enrolled for at least 1 day during the calendar year. The claims files include fee-for-service claims, managed care encounters, and financial transactions (such as capitation payments, supplemental payments, and service tracking claims) paid for by Medicaid or CHIP.

We limited our analysis to Medicaid or CHIP beneficiaries ages 14-65, which we considered the working-age population.[iv] These are the beneficiaries most likely to use supported employment services.

We calculated the number of beneficiaries enrolled in Medicaid and CHIP in 2019 for the following categories: age (14-17 years, 18-24 years, 25-29 years, 30-34 years, 35-44 years, 45-54 years, and 55 years and over); sex (male/female); race/ethnicity (White, Black, Asian, American Indian/Alaska Native, Hawaiian/Pacific Islander, multiracial, Hispanic, or unknown); geographic location (urban/rural); disability status; and chronic condition status. We then counted among the number of working-age beneficiaries how many had claims for a supported employment service.

[ii] Medicaid will not cover supported employment services that are available as vocational rehabilitation services funded under Section 110 of the Rehabilitation Act of 1973, or in the case of youth, under the provisions of the Individuals with Disabilities Education Act.

[iii] We used 2017-2018 TAF RIF in the look-back period when identifying beneficiaries with a disability or chronic condition.

[iv] The minimum age for the working-age population is based on the general rule for the minimum age for employment set by the Fair Labor Standards Act. The maximum age of 65 is based on Social Security's full retirement age.

We used certain data elements in the TAF RIFs to identify supported employment service claims, beneficiaries with a disability, and beneficiaries with chronic conditions. To find supported employment claims in the working-age Medicaid population, we used national and state-specific procedure codes and other TAF RIF data elements (such as type of service, benefit type, and taxonomy codes). We used enrollment records in the DE file and claims files to identify people with disabilities, including eligibility groups that indicate disability or programs that are exclusively for persons with disabilities. We identified beneficiaries with potential chronic conditions using CMS's standardized approach, which is available from the Chronic Conditions Data Warehouse (CCW) [5]. The CCW algorithm uses diagnosis codes and procedure codes in claims data to find beneficiaries with a chronic condition.

To ensure the accuracy and completeness of data, we used data quality assessments featured in the Data Quality (DQ) Atlas.[v] Data for any state are considered unusable based on Data Quality Atlas thresholds for the following topics: total Medicaid and CHIP enrollment; OT claims volume; diagnosis code--IP, OT; procedure codes--OT professional; beneficiary information--race and ethnicity, ZIP code; and the linking of service claims to beneficiaries.[vi]

Appendix A provides more details on the methods we used to identify supported employment claims, beneficiaries with a disability, and beneficiaries with chronic conditions. Of note, this analysis did not investigate how states used their Medicaid authorities to fund supported employment services and relies only on claiming to investigate the use of supported employment.

FINDINGS

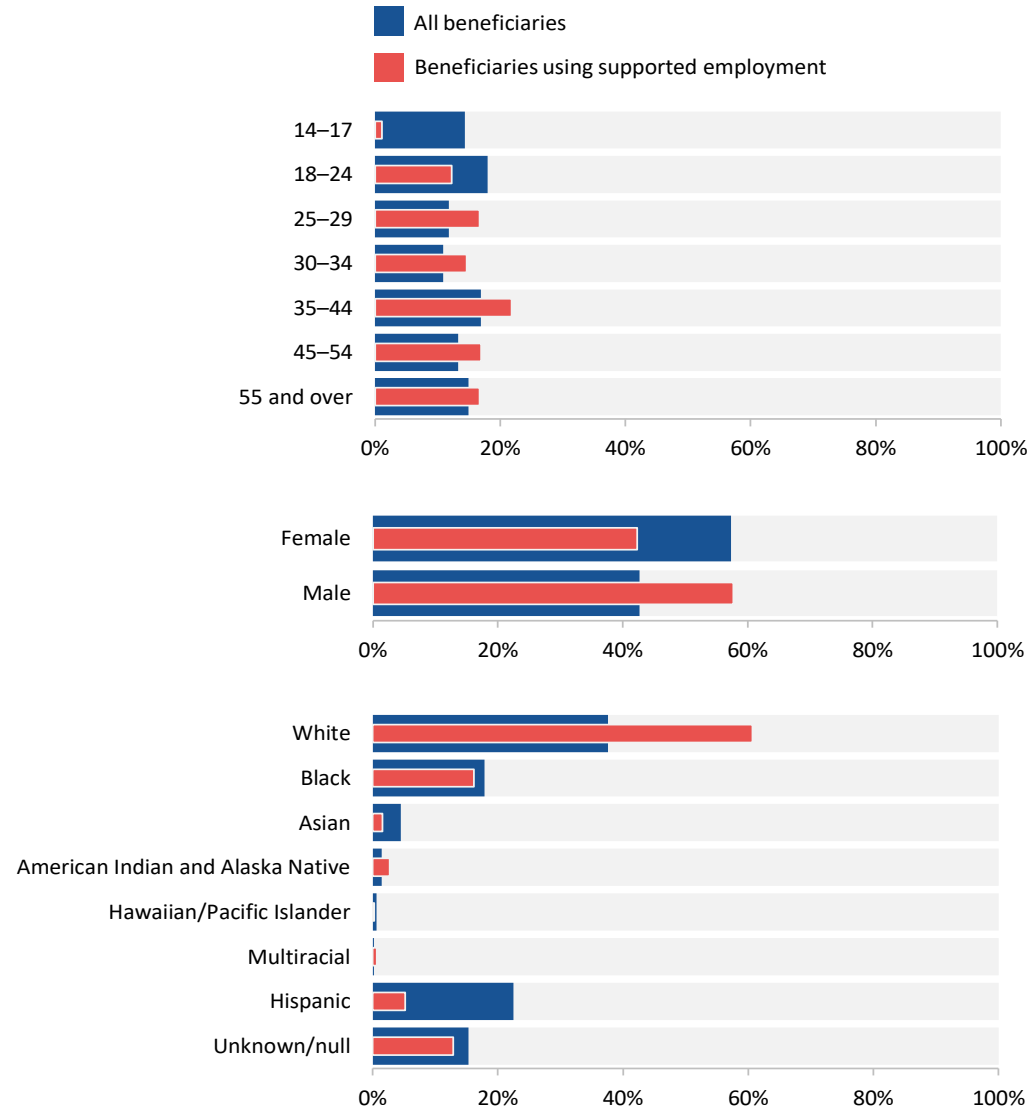
Of the 52 million Medicaid and CHIP beneficiaries ages 14-65 in the 47 states we analyzed, 144,128 (less than 1.0%) had a supported employment claim in 2019. **Figure 1** shows the distributions of age, sex, and race/ethnicity for all working-age beneficiaries compared with working-age beneficiaries who received supported employment services.

Beneficiaries receiving supported employment services are disproportionately older, male, and White compared with the general working-age population in Medicaid. For example, few minors (ages 14-17) received these services. Of those who received the services, 57.7% were male, but males make up only about 42.7% of working-age Medicaid beneficiaries. When examining the race and ethnicity distributions, only 5.1% of beneficiaries using supported employment were Hispanic, even though 22.5% of the working-age Medicaid and CHIP population were Hispanic.

[v] For more information, see the Data Quality Atlas: https://www.medicaid.gov/dq-atlas/welcome.

[vi] We excluded Utah because of unusable procedure codes on professional claims. We excluded Alabama, Kansas, Michigan, Rhode Island, and Tennessee because of unusable race and ethnicity data, and we excluded Rhode Island because of unusable ZIP codes. In addition, we performed an analysis not currently in Data Quality Atlas that measured the percentage of service use records that did not link to an eligibility record. Alabama and Rhode Island had unusable data in 2019.

Figure 1. Distributions of Demographic Characteristics, All Beneficiaries versus Beneficiaries Who Used Supported Employment (2019)



Source: Mathematica's analysis of the TAF RIF (2019), available through the CMS Virtual Research Data Center.
Notes: The percent distribution for each of these populations sums to 100.

Disability Status and Chronic Conditions

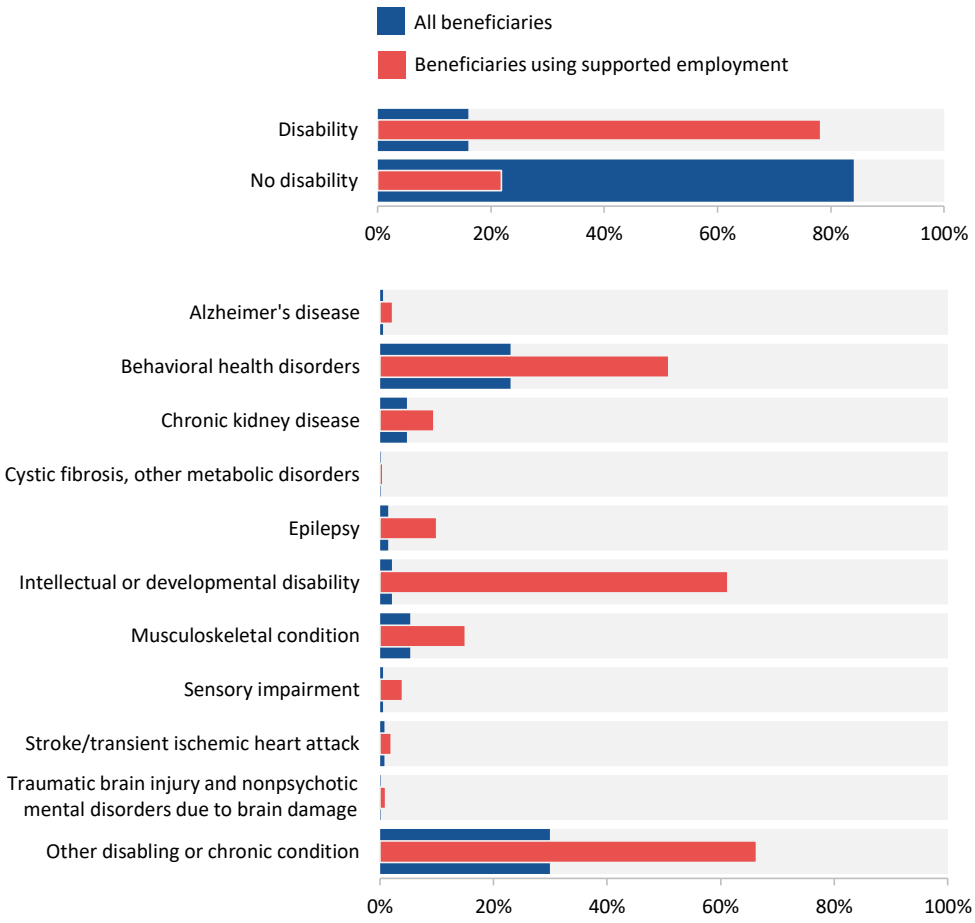
Figure 2 compares the distributions of disability status and chronic conditions between beneficiaries receiving supported employment services and those not receiving services. Receipt of supported employment services was much more common among those with a disability[vii] and several of the chronic conditions[viii] compared with other beneficiaries, as would be expected, given that these programs generally support persons with

[vii] We used eligibility groups and program enrollment information in the enrollment records and claims files to identify people with disabilities. We identified anyone with an enrollment record or claim indicating the person's participation in a 1915(c) waiver; 1915(i), (j), or (k) state plan options; Programs of All-Inclusive Care for the Elderly (PACE); or the MFP demonstration as someone who has a disability. See **Appendix A** for details on how we identified beneficiaries with a disability.

[viii] The CCW algorithm uses diagnosis and procedure codes to identify beneficiaries with a chronic condition. See **Appendix A** for details on how we identified beneficiaries with a chronic condition.

disabilities. For example, although only 16.0% of the working-age Medicaid and CHIP population had a disability, 78.2% of working-age beneficiaries using supported employment were identified as having a disability. Likewise, only 2.1% of working-age beneficiaries had an intellectual or developmental disorder, but 61.2% of beneficiaries using supported employment were identified as having an intellectual or developmental disorder. And only 23.0% of all beneficiaries had a behavioral health condition, but 50.8% of beneficiaries using supported employment had a behavioral health condition.

Figure 2. Distributions of Disability Status and Chronic Condition Characteristics, All Beneficiaries versus Beneficiaries Who Used Supported Employment (2019)



Source: Mathematica's analysis of the TAF RIF (2019), available through the CMS Virtual Research Data Center.
Notes: The percent distribution of disability status sums to 100. However, the percent distribution of chronic condition characteristics does not sum to 100 because beneficiaries could have more than 1 chronic condition. The percent distribution of beneficiaries with chronic conditions is not a breakout of beneficiaries with a disability. A beneficiary with a potential chronic condition could be included in the subpopulation of beneficiaries with no disability.

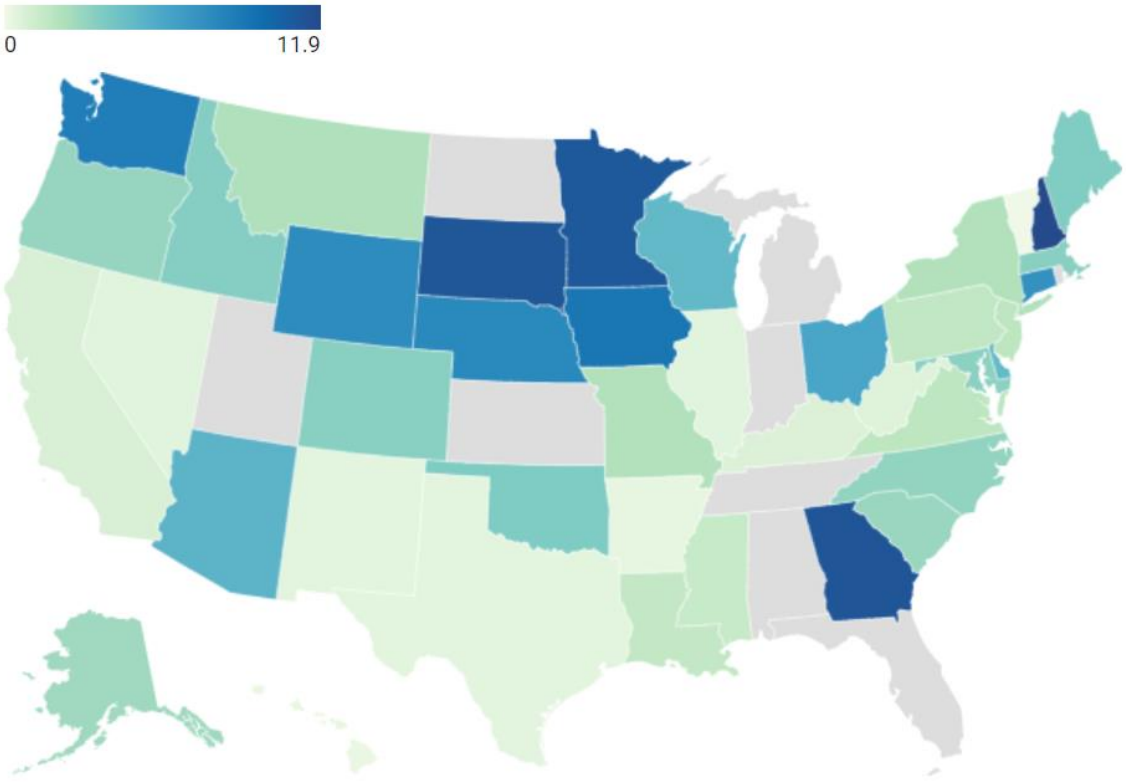
Supported Employment Across States

Figure 3 shows the use of supported employment per capita (per 1,000 working-age Medicaid and CHIP beneficiaries) across the United States and U.S. territories (territories not shown). We did not present data on states with known or suspected issues with data quality. In addition, we did not present data for North Dakota on the map, as it had an unexpectedly high number of Medicaid and CHIP beneficiaries with a claim for supported employment, along with a high number of claims that matched to HCBS taxonomy codes for

supported employment.[ix] As discussed in **Appendix A**, we are unsure of the reliability of the HCBS taxonomy data element in the TAF RIF and could not confirm if all claims identified were in fact for supported employment services. North Dakota and the states that had data quality issues, as described in the "Methods" section, are colored gray in the map.

By state, the per capita rate of beneficiaries using supported employment services was 0.0-11.9 per 1,000 beneficiaries. Puerto Rico, Vermont, and the Virgin Islands did not have any beneficiaries with a claim for supported employment services. Georgia, Minnesota, New Hampshire, and South Dakota had the highest per capita rates, which were about 11 recipients of supported employment services per 1,000 Medicaid and CHIP beneficiaries.

Figure 3. Supported Employment Users per 1,000 Medicaid and CHIP Beneficiaries (ages 14-65), by State (2019)



Source: Mathematica's analysis of the TAF RIF (2019), available through the CMS Virtual Research Data Center.
Note: The states colored gray (Alabama, Kansas, Michigan, North Dakota, Rhode Island, Tennessee, and Utah) have issues with data quality, and it was not possible to verify whether there was any use of supported employment in the Medicaid program for these states.

DISCUSSION

We found limited claiming of supported employment services among Medicaid and CHIP beneficiaries. In the Medicaid working-age population, use of adult day service[x] was almost four times higher than use of

[ix] The relevant HCBS taxonomy codes were 03010--Job Development; 03021--Ongoing Supported Employment, Individual; 03022--Ongoing Supported Employment, Group; and 03030--Career Planning.

[x] Adult day service refers to activities that focus on socialization, supervised activities, some health services, and other ways for participants, typically older people or people with disabilities, to engage with the community.

supported employment. Beneficiaries who use supported employment services are clearly different from those who do not. Service users are older and more likely to be male and White. They also have higher rates of disability and are more likely to have intellectual or developmental disabilities and behavioral health conditions, as is to be expected by the nature of the services which are designed for persons with disabilities. Some of these differences are expected, given that many states offer supported employment services only to beneficiaries in 1915(c) waiver programs and other programs for certain people with disabilities, or through 1115 waivers for individuals with certain conditions. There are many potential barriers to using these services, such as limited access, inconsistent funding of services, inadequate knowledge of the meaning of supported employment, individual behavioral issues, and stigma associated with disability [6]. We did not explore which of these barriers or other issues might have affected the receipt of supported employment services by Medicaid and CHIP beneficiaries, nor did we examine unmet need for supported employment services. Potential barriers for certain demographic groups might be a topic of interest for future studies.

States may cover supported employment services through various authorities and through other programs, such as vocational rehabilitation, which might account for the differences in service use across states. Additional evaluation of the authorities could determine if the type of authority (such as 1915(c) waivers, 1115 waivers, or MFP) is associated with higher or lower use of supported employment. For example, do states with higher use of supported employment services have 1915(c) waivers that offer services to people with intellectual or developmental disabilities?

Another potential impact on service use might be the type of services provided under vocational rehabilitation. The interaction between states' vocational rehabilitation programs and state Medicaid programs might explain the different per capita rates we saw from state to state. Additional evaluation of the authorities used to cover supported employment, and a closer look at the interaction between Medicaid and vocational rehabilitation, might explain the range of service use across states. Due to the limitations of the TAF RIF data, primary data collection, such as interviews with different state departments, might be required to understand the various options beneficiaries have when receiving supported employment services.

The finding that a large share of supported employment users (78%) had a disability met our expectations, based on the literature [6,7]. Accordingly, we could not document a disability for 22% of working-age beneficiaries using these services. States' eligibility requirements for supported employment services do not always include the presence of a disability. These services can be beneficial for other groups of interest to Medicaid, such as persons with behavioral health conditions that may not qualify for Medicaid based on a disability [2]. Further investigation is needed to determine state Medicaid programs' eligibility requirements for these services.

Limitations

This analysis had several limitations. First, although procedure codes identified most of the claims for supported employment, the data most likely do not reflect the full number of these claims covered by Medicaid programs, as many states use state-specific codes for HCBS. In this analysis, we did not investigate state-specific authorities for the use of supported employment. Second, though we included type of service, benefit type, and HCBS taxonomy codes to help identify more supported employment claims, the reliability of the data is unknown. Third, our analysis did not include any supported employment services provided by state vocational rehabilitation systems. When identifying people with disabilities, we used enrollment records to find enrollees in 1915(c) waivers, state plan options, PACE or MFP, but some states provided incomplete or inaccurate enrollment data for these programs, so we likely undercounted beneficiaries in the programs [8]. Fourth, we might have underestimated the number of supported employment users who have a chronic condition, as users who did not seek treatment are not identified in the data.

APPENDIX A: ADDITIONAL METHODOLOGICAL INFORMATION

Identification of Supported Employment Claims

We used national procedure codes for supported employment to identify most of the supported employment services reported in Medicaid claims records. The procedure codes are from the Healthcare Common Procedure Coding System (HCPCS) code list, which providers use to identify the services rendered when filing claims. Although we had state-specific procedure codes for seven states (California, Connecticut, Idaho, Iowa, New York, Pennsylvania, and Wyoming), only three states (California, Connecticut, and Pennsylvania) used the state-specific codes during the measurement period. More states likely have their own state-specific procedure codes for supported employment, but we did not attempt to obtain codes from additional states given the resources required for that type of data collection.

To minimize the undercounting of supported employment services, in addition to HCPCS procedure codes, we used other data elements in the OT file such as type of service, benefit type, and HCBS taxonomy codes. The type of service code classifies individual services into standard categories such as code 076 for HCBS--Expanded Habilitation Services--Supported Employment Services, which facilitate paid employment [9]. The benefit type code categorizes services into benefit types defined in the Medicaid and CHIP Program Data System. The relevant benefit type codes for this analysis were 080 for Habilitation: Supported Employment Benefits and 099 for Supported Employment Benefits. Finally, the HCBS taxonomy codes come from a uniform classification system used to describe and categorize community-based long-term care services [10]. Supported employment is one of 18 HCBS taxonomy categories and includes job development, ongoing supported employment (individual or group), and career planning services.

States did not use these other three data elements consistently. For example, claims with a supported employment HCBS taxonomy code did not necessarily have 076 as the type of service code. Many claims also had a type of service code for supported employment but a procedure code associated with an adult day service [11].[xi] The TAF RIF guidance documents identify instances in which states might classify the same service under different codes [12]. Although providers must submit procedure codes on their bills to be reimbursed, state Medicaid agencies populate the type of service codes, benefit type codes, and HCBS taxonomy codes. In addition, states are new to reporting the HCBS taxonomy codes, and so the reliability of the reported codes is currently unknown. We therefore indicated where an unusual number of supported employment claims might have been identified using data elements other than procedure codes.

Identification Strategy for Beneficiaries with a Disability

Because supported employment has been proven to help people with disabilities obtain employment, we used the TAF RIF to identify the subpopulation of beneficiaries with a disability. Typically, a person with a disability is defined as someone who has a physical, intellectual, or mental impairment that limits his or her ability to perform major life activities (such as caring for oneself, walking, or seeing) [13]. People with disabilities might be eligible for Medicaid through multiple pathways, including through receipt of Supplemental Security Income.

We used enrollment records in the DE file and claims files to identify people with disabilities. In the TAF RIF DE file, states place beneficiaries into different eligibility groups based on the states' eligibility determination process [14]. Some of these groups are associated with people with disabilities, and we used them for this analysis. States can also indicate if a beneficiary is enrolled in a program for people with disabilities, such as

[xi] Adult day service refers to activities that focus on socialization, supervised activities, some health services, and other ways for participants, typically older people or people with disabilities, to engage with the community.

enrollment in a 1915(c) waiver; 1915(i), (j), or (k) state plan options; PACE; or the MFP demonstration. We used these indicators from the DE file to identify beneficiaries with a disability. Besides enrollment records, we identified claims in the IP, LT, and OT files that had 1915(c), 1915(i), 1915(j), or 1915(k) services, which we presumed to be services for beneficiaries with a disability. We also searched for claims associated with a stay in an intermediate care facility for people with intellectual disability, which we also presumed to be a claim for a beneficiary with a disability.

Enrollment records and claims might not reveal all people with disabilities. We can find beneficiaries with a disability using the determination of their eligibility for Medicaid enrollment, such as their Medicaid eligibility determined by enrollment in Supplemental Security Income. However, beneficiaries might meet multiple eligibility criteria, which may or may not indicate they have a disability. Using claims might identify more people with a disability, but not all people with a disability receive types of services that would indicate their disability status.

When using service claims to identify beneficiaries with a disability, we used a 2-year look-back period. That is, the beneficiary must have had a qualifying claim in 2018 or 2019 to be identified as a beneficiary with a disability in 2019.[xii] It is possible that a beneficiary did not meet any of the four criteria but still had a disability.

Identification Strategy for Beneficiaries with a Chronic Condition

The method used to identify beneficiaries with a disability cannot determine the type or severity of the disabling conditions. For example, an enrollment record might indicate that a beneficiary is participating in a 1915(c) waiver, but it will not provide details on the 1915(c) waiver's focus group.[xiii] We therefore used a different algorithm to detect potential chronic conditions a beneficiary might have, whether we identified the person as having a disability.[xiv]

We identified behavioral health and other chronic conditions in claims data using the CMS standardized approach, which is available from the CCW [5]. The CCW algorithm uses diagnosis and procedure codes to identify beneficiaries with a chronic condition. We used this algorithm to find beneficiaries with other potentially disabling conditions not included in the disability identification methodology described previously. **Table A1** lists the disorders identified by the algorithm as chronic conditions, including disorders in the behavioral health category.

[xii] Because we used a 2-year look-back period, the first year of our analysis will be 2017, which uses the first year of data available, 2016, and 2017.

[xiii] The HCBS 1915(c) waiver supports state HCBS waiver programs serving people who prefer to receive long-term care services and supports in their home or community. The waiver allows states to tailor services to meet the needs of certain groups based on age or diagnosis, such as physical or intellectual disabilities.

[xiv] A person identified as having a potential chronic condition may or may not have been identified as having a disability. If the person did not meet our criteria for having a disability but has a potential chronic condition, our algorithm cannot determine the severity of the condition or determine if the condition is disabling.

Table A1. Behavioral Health and Chronic Conditions Identified using the CCW Algorithm[a]	
Disorders included in behavioral health category	**Other chronic condition categories**
Attention deficit hyperactivity disorder	Alzheimer's disease
Anxiety	Chronic kidney disease
Bipolar disorder	Cystic fibrosis, other metabolic disorder
Depressive disorder	Epilepsy
Depression	Intellectual or developmental disability
Personality disorder	Musculoskeletal condition
Post-traumatic stress disorder	Sensory impairment
Psychotic disorder	Stroke/transient ischemic heart attack
Schizophrenia, other psychotic disorder	Traumatic brain injury and nonpsychotic mental disorders due to brain damage
Other mental illness	
Alcohol use disorder	Other disabling or chronic condition[b]
Drug use disorder	
Opioid use disorder	

a. The CCW algorithm examines certain service use patterns during a 2-year reference period to identify beneficiaries with a chronic condition during a particular year. The algorithm identifies a beneficiary as having been treated for a chronic condition if the beneficiary has 1 inpatient or 2 outpatient or residential claims for treatment of a chronic condition on different dates of service.

b. Other chronic conditions include acquired hypothyroidism; atrial fibrillation; acute myocardial infarction; anemia; asthma; benign prostatic hyperplasia; colorectal cancer; endometrial cancer; female or male breast cancer; lung cancer; prostate cancer; cataract; glaucoma; heart failure; chronic obstructive pulmonary disease and bronchiectasis; diabetes; fibromyalgia and chronic pain and fatigue; hyperlipidemia; hypertension; ischemic heart disease; viral hepatitis (general); human immunodeficiency virus and/or acquired immunodeficiency syndrome (HIV/AIDS); leukemias and lymphomas; liver disease, cirrhosis, and other liver conditions; migraine and chronic headache; multiple sclerosis and transverse myelitis; obesity; peripheral vascular disease; pressure and chronic ulcers; spina bifida and other congenital anomalies of the nervous system; tobacco use disorders; and sickle cell disease.

APPENDIX B: RESULTS OF SUPPORTED EMPLOYMENT USERS PER 1,000 MEDICAID AND CHIP BENEFICIARIES (AGES 14-65), BY STATE (2019)

State	Beneficiaries Using Supported Employment per 1,000 Medicaid and CHIP Beneficiaries
UNITED STATES	2.8
ALABAMA	DQ
ALASKA	2.7
ARIZONA	5.2
ARKANSAS	0.3
CALIFORNIA	0.8
COLORADO	3.4
CONNECTICUT	7.4
DELAWARE	4.8
DISTRICT OF COLUMBIA	6.2
FLORIDA	DS
GEORGIA	11.2
HAWAII	0.2
IDAHO	3.5
ILLINOIS	0.5
INDIANA	DS
IOWA	9.1
KANSAS	DQ
KENTUCKY	0.7
LOUISIANA	1.5
MAINE	3.6
MARYLAND	3.3
MASSACHUSETTS	3.4
MICHIGAN	DQ
MINNESOTA	11
MISSISSIPPI	1.4
MISSOURI	2.1
MONTANA	2.2
NEBRASKA	7.9
NEVADA	0.5
NEW HAMPSHIRE	11.9
NEW JERSEY	1.7
NEW MEXICO	0.4
NEW YORK	2.1

State	Beneficiaries Using Supported Employment per 1,000 Medicaid and CHIP Beneficiaries
NORTH CAROLINA	3.1
NORTH DAKOTA	DQ
OHIO	6.1
OKLAHOMA	3.7
OREGON	3
PENNSYLVANIA	1.6
PUERTO RICO	0
RHODE ISLAND	DQ
SOUTH CAROLINA	2.9
SOUTH DAKOTA	11.1
TENNESSEE	DQ
TEXAS	0.4
UTAH	DQ
VERMONT	0
VIRGIN ISLANDS	0
VIRGINIA	1.7
WASHINGTON	8.6
WEST VIRGINIA	0.6
WISCONSIN	4.9
WYOMING	7.7

DQ = Unable to report because data for populating the cell have "unusable" quality.

DS = Data are suppressed because the state had fewer than 11 people using supported employment services, or the state had the second lowest count of people for the year to prevent calculation of the suppressed data cell.

REFERENCES

1. D.R. Becker, H. Xie, G.J. McHugo, J. Halliday, and R.A. Martinez. "What predicts supported employment program outcomes?" *Community Mental Health Journal*, vol. 42, no. 3, pp. 303-313, 2006.
2. Centers for Medicare & Medicaid Services (CMS). "CMCS Information Bulletin--Updates to the 1915(c) waiver instructions and technical guide regarding employment and employment-related services." Informational Bulletin, 2011. http://www.cms.gov/CMCSBulletins/downloads/CIB-9-16-11.pdf (accessed September 20, 2022).
3. U.S. Department of Health and Human Services, Office of the Assistant Secretary for Planning and Evaluation. "Federal financing of supported employment and customized employment for people with mental illnesses: Final report." 2011. https://aspe.hhs.gov/sites/default/files/migrated_legacy_files/43566/supempFR.pdf (accessed September 20, 2022).
4. U.S. Department of Education, Office of Special Education and Rehabilitative Services. "Rehabilitation Services Administration report for fiscal years 2017-2020: Report on federal activities under the Rehabilitation Act of 1973." Washington, D.C., 2022.
5. Centers for Medicare & Medicaid Services (CMS). "30 CCW chronic conditions algorithms: MBSF_CHRONIC_{YYYY} file." Chronic Conditions Data Warehouse. https://www2.ccwdata.org/web/guest/condition-categories-chronic (accessed September 20, 2022).
6. C. Lin, and R.K. Chen, "Developments, barriers, and implications of supported employment for people with disabilities." *Journal of Rehabilitation Administration*, vol. 38, no. 2, pp. 63-72, 2014.
7. Medicaid and CHIP Payment and Access Commission. "The role of Medicaid in supporting employment." Issue Brief, 2018. https://www.macpac.gov/wp-content/uploads/2018/07/The-Role-of-Medicaid-in-Supporting-Employment.pdf (accessed September 20, 2022).
8. Center for Medicaid and CHIP Services. "Reporting waiver-type and waiver identifier in T-MSIS (special programs)." Medicaid.gov. https://www.medicaid.gov/medicaid/data-and-systems/macbis/tmsis/tmsis-blog/entry/47583 (accessed September 20, 2022).
9. Research Data Assistance Center. "Type-of-service code." Find, Request and Use CMS Data|ResDAC. https://resdac.org/cms-data/variables/type-service-code (accessed September 20, 2022).
10. V. Peebles and A. Bohl. "The HCBS taxonomy: A new language for classifying home and community-based services." Medicaid Policy Brief no. 19, 2013. https://www.cms.gov/Research-Statistics-Data-and-Systems/Computer-Data-and-Systems/MedicaidDataSourcesGenInfo/Downloads/MAX_IB19_Taxonomy.pdf (accessed September 20, 2022).
11. C. Friedman. "Day habilitation services for people with intellectual and developmental disabilities in Medicaid home and community-based services waivers." *Research and Practice for Persons with Severe Disabilities*, vol. 41, no. 4, pp. 244-255, 2016.
12. Medicaid and CHIP Business Information Solutions. "DQ Atlas background and methods resource: Type of service--OT." Welcome|DQ Atlas. https://www.medicaid.gov/dq-atlas/downloads/background_and_methods/TAF_DQ_Type_of_Service_OT.pdf (accessed September 20, 2022).
13. U.S. Department of Health and Human Services, Office for Civil Rights. "Fact sheet: Your rights under Section 504 of the Rehabilitation Act." HHS.gov. https://www.hhs.gov/sites/default/files/ocr/civilrights/resources/factsheets/504.pdf (accessed September 20, 2022).

14. L. Nolan, A. Barrett, L. Nguyen, J. Dowell, K. Proctor, and J. Parker. “TAF technical guidance: Annual Demographic & Eligibility (DE) file.” Technical Guidance Document, 2022. https://resdac.org/sites/datadocumentation.resdac.org/files/2022-04/TAF_TechGuide_DE_File.pdf (accessed September 20, 2022).

U.S. DEPARTMENT OF HEALTH AND HUMAN SERVICES

Office of the Assistant Secretary for Planning and Evaluation

200 Independence Avenue SW, Mailstop 447D
Washington, D.C. 20201

For more ASPE briefs and other publications, visit:
aspe.hhs.gov/reports

ABOUT THE AUTHORS
Judy Dey, Ph.D., works in the Office of Behavioral Health, Disability, and Aging Policy in the Office of the Assistant Secretary for Planning and Evaluation.

Joy Rooney, M.P.P.; Carol Irvin, Ph.D.; Jeral Self, Ph.D.; and Laura Nolan, Ph.D., work at Mathematica.

SUGGESTED CITATION
Rooney, J., Irvin, C., Self, J., Nolan, L. & Dey, J. Use of Supported Employment in the Medicaid and CHIP Working-Age Population (Issue Brief). Washington, DC: Office of the Assistant Secretary for Planning and Evaluation, U.S. Department of Health and Human Services. June 28, 2024.

Subscribe to ASPE mailing list to receive email updates on new publications:
aspe.hhs.gov/join-mailing-list

For general questions or general information about ASPE:
aspe.hhs.gov/about