Medicaid Long-Term Services and Supports Use and Expenditures by Service Category, 2019–2021

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Background

Federal Medicaid rules allow states to cover a wide range of institutional and home and community-based long-term services and supports (LTSS). States use a combination of different programs, types of services, and delivery models to serve people who need LTSS. This brief presents the national distribution of Medicaid users and expenditures across different home and community-based services (HCBS) and institutional categories for 2021 using data from the Transformed Medicaid Statistical Information System (T-MSIS) Analytic Files (TAF).[2,3,4] We also describe trends in HCBS and institutional users and expenditures between 2019 and 2021.

Key findings

- 7.5 million HCBS users had $115.0 billion in HCBS spending in 2021. HCBS users and expenditures increased by 0.3 percent and 18.4 percent, respectively, from 2019 to 2021.
- 1.5 million institutional service users had $67.0 billion in institutional spending in 2021. Institutional users and expenditures decreased by 18.0 percent and 7.2 percent, respectively, from 2019 to 2021.
- FFS accounted for 46.2 percent of LTSS users and 62.0 percent of LTSS expenditures in 2021, while managed care accounted for 60.3 percent of LTSS users and 38.0 percent of LTSS expenditures.[1]

The following 10 HCBS categories used in this analysis align with those eligible for a temporary 10 percentage point increase in the federal medical assistance percentage (FMAP) under section 9817 of the American Rescue Plan Act of 2021 (ARP):[5] section 1915(c) waiver programs; section 1915(i) HCBS state plan option; section 1915(j) self-directed personal

[1] The percentage of users who received LTSS through FFS versus managed care does not sum to 100 because some beneficiaries received both FFS and managed care services at some point during the year.

[2] When interpreting findings, please note that the completeness, quality, and consistency of TAF data varies by state. For more information on the data source, methodology, state anomalies, and data tables, see the Methods box at the end of this brief.

[3] For more information on the user and expenditure rebalancing ratios, see "Trends in the Use of and Spending for Home and Community-Based Services as a Share of Total LTSS Use and Spending in Medicaid, 2019–2021," available at https://www.medicaid.gov/medicaid/long-term-services-supports/reports-evaluations/index.html.

[4] Alabama's 2021 LTSS measures have been suppressed due to concerns about the quality of the TAF data used in the calculations. All LTSS measures for the state have been replaced with a value of "NC" indicating that the state's LTSS measures have not been calculated and their data are not included in any national calculations.

[5] For more information on HCBS categories eligible for the temporary FMAP increase under ARP section 9817, see https://www.medicaid.gov/sites/default/files/2022-03/smd21003-update.pdf.

assistance services (PAS); section 1915(k) Community First Choice; Program of All-Inclusive Care for the Elderly (PACE); state plan personal care services; state plan home health services; state plan rehabilitative services; state plan case management services; and state plan private duty nursing services.[6]

We defined four institutional categories that align with previously published expenditure analyses:[7] nursing facility; intermediate care facility for individuals with intellectual disabilities (ICF/IID); mental health facility; and mental health facility disproportionate share hospital (DSH) payments.[8,9]

Distribution of users and expenditures by HCBS categories, 2021

HCBS users by category. Nationwide, 7,461,364 people received HCBS in 2021 through a variety of Medicaid HCBS waiver programs and state plan options.[10,11] The largest share of HCBS users received state plan home health services (2,303,626 or 30.9 percent), state plan rehabilitative services (2,166,079 or 29.0 percent), state plan case management services (1,738,604 or 23.3 percent), and section 1915(c) waiver program services (1,715,504 or 23.0 percent) (Figure 1). Fewer HCBS users received HCBS through other programs and options including state plan personal care services (843,438 or 11.3 percent), section 1915(j) self-directed PAS option[12] (517,901 or 6.9 percent), section 1915(i) HCBS state plan option (355,524 or 4.8 percent), section 1915(k) Community First Choice (153,163 or 2.1 percent), PACE (71,325 or 1.0 percent), and state plan private duty nursing services (53,624 or 0.7 percent).

HCBS expenditures by category. The ordering of HCBS category by expenditures is much different than the ordering of categories by user counts. This could be due to the cost per unit of service, different

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[6] We assigned each claim to one category, with program-based services assigned first followed by section 1905(a) state plan services. Program-based services are services for which enrollment information exists and include section 1915(c) waiver programs, section 1915(i) HCBS state plan option, section 1915(j) self-directed PAS option, section 1915(k) Community First Choice, Money Follows the Person [MFP] demonstration, and PACE). MFP demonstration services are included as an individual category in accompanying table output, but they are not included in the aggregate calculations of total HCBS or total LTSS expenditures or users in this brief because they are not defined as HCBS under ARP section 9817.

[7] LTSS expenditure reports for prior years are available at https://www.medicaid.gov/medicaid/long-term-services-supports/reports-evaluations/index.html.

[8] For these analyses, institutional LTSS include nursing facilities, ICFs/IID, and mental health facilities. Although some states cover services for adults ages 21 to 64 in institutions for mental diseases through the section 1115 demonstration authority, we were unable to ensure this group was included in the mental health facilities category because there was no recommended (tested) method of reliably identifying this population in the TAF.

[9] As required by federal law, state Medicaid agencies distribute DSH payments to institutions that serve a large number of Medicaid beneficiaries and people without insurance coverage to support the institutions' financial stability. These direct provider payments can be viewed as part of a state's overhead cost to providing institutional LTSS to people with low resources.

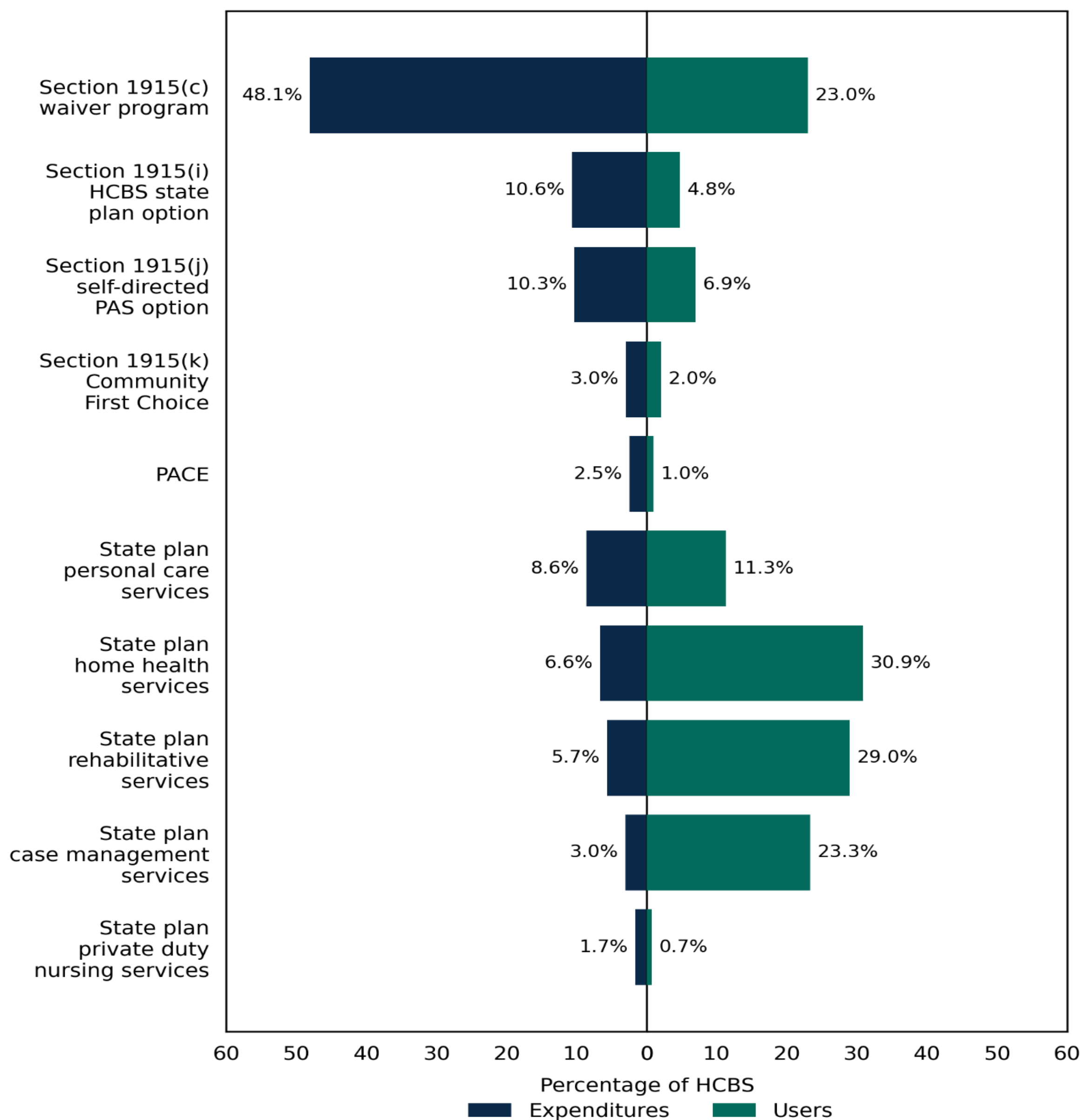
[10] Alabama is excluded from all user and expenditure measures in 2021.

[11] The percentage of users across different HCBS categories does not sum to 100 because some beneficiaries received more than one type of HCBS during the year.

[12] Based on data quality checks and feedback from states, relative to other categories, many states misreported data on section 1915(j) self-directed PAS option claims, resulting in higher counts than expected; therefore, counts and expenditures for this category should be interpreted with caution.

populations served, and variation in the intensity and duration of services for different categories of HCBS (Figure 1). This results in larger variation across the categories for expenditures. HCBS expenditures totaled $115.0 billion nationwide in 2021, with the largest share for people receiving section 1915(c) waiver program services ($55.3 billion or 48.1 percent). Much smaller shares of HCBS expenditures were for section 1915(i) HCBS state plan option ($12.2 billion or 10.6 percent), section 1915(j) self-directed PAS option ($11.9 billion or 10.3 percent), state plan personal care services ($9.9 billion or 8.6 percent), state plan home health services ($7.6 billion or 6.6 percent), state plan rehabilitative services ($6.5 billion or 5.7 percent), state plan case management services ($3.5 billion or 3.0 percent), section 1915(k) Community First Choice ($3.4 billion or 3.0 percent), PACE ($2.8 billion or 2.5 percent), and state plan private duty nursing services ($1.9 billion or 1.7 percent).

Figure 1. Distribution of Medicaid HCBS users and expenditures by category, 2021



Source: Mathematica's analysis of the 2021 TAF Release 1.

Note: We defined HCBS categories based on section 9817 of the ARP. The percentage of users across the categories does not sum to 100 because some beneficiaries received more than one type of HCBS during the year. Based on data quality checks and feedback from states, relative to other categories, many states misreported data on section 1915(j) self-directed PAS claims, resulting in higher counts than expected; therefore, these counts should be interpreted with caution. Alabama's users and expenditures data were excluded from 2021 calculations due to data quality concerns.

ARP = American Rescue Plan Act of 2021; HCBS = home and community-based services; PACE = Program of All-Inclusive Care for the Elderly; PAS = personal assistance services; TAF = Transformed Medicaid Statistical Information System Analytic File.

HCBS users and expenditures by delivery system. Although more HCBS users received services through managed care (62.6 percent) versus fee-for-service (FFS) (43.5 percent),[13] HCBS delivered through FFS accounted for a higher proportion of expenditures (61.0 percent for FFS versus 39.0 percent for managed care).[14]

Distribution of users and expenditures by institutional categories, 2021

Institutional service users by category. Far fewer people (1,462,774 users) received institutional services than HCBS in 2021. There were 80.4 percent fewer users of institutional services than HCBS. The vast majority of people using institutional care received services at nursing facilities (1,271,428 or 86.9 percent) (Figure 2).[15] Fewer people received services at mental health facilities (132,299 or 9.0 percent) or services at ICFs/IID (74,498 or 5.1 percent).

Institutional LTSS expenditures by category. Expenditures for institutional LTSS totaled $67.0 billion nationwide in 2021, 41.8 percent less than HCBS expenditures. Similar to the patterns for institutional service users, the vast majority of institutional LTSS expenditures were for services at nursing facilities ($55.1 billion or 82.3 percent) (Figure 2). Although there were more mental health facility users than ICF/IID users, expenditures were higher for services at ICFs/IID ($9.3 billion or 13.9 percent). Mental health facility expenditures were a small share of total institutional expenditures ($2.4 billion or 3.7 percent), and mental health facility DSH[16] accounted for about $89.4 million or 0.1 percent of total institutional expenditures.

[13] The percentage of users who received HCBS through FFS versus managed care does not sum to 100 because some beneficiaries received both FFS and managed care services at some point during the year.

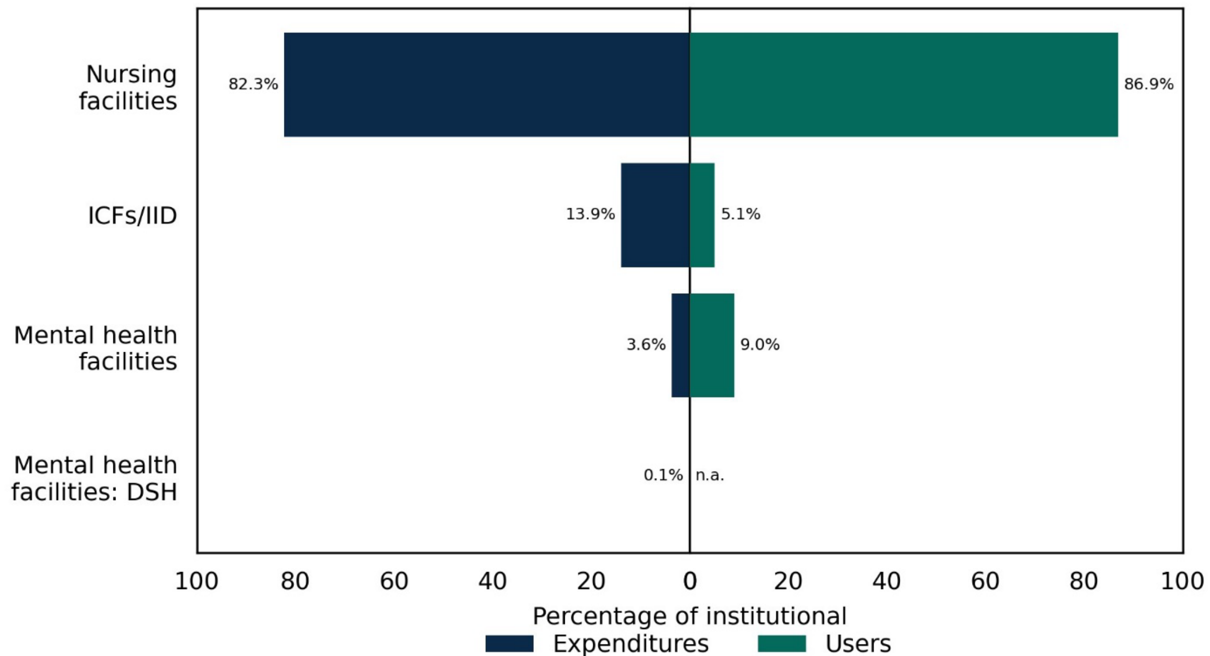
[14] FFS expenditures represent state payments to providers, whereas managed care expenditures in this analysis represent managed care plan payments to providers (except for PACE expenditures, which represent capitation payments from states to PACE plans). Therefore, the managed care expenditures in this analysis likely underestimate the total amount states pay to managed care plans to cover HCBS for their members because the capitation payments from states to managed care plans are based on both the amount to cover the anticipated health care costs of covered enrollees as well as payments to cover plan administration, reserves, and profit.

[15] The percentage of users across different institutional service categories does not sum to 100 because some beneficiaries received more than one type of institutional care during the year.

[16] The quality and completeness of TAF data on mental health facility DSH payments and other financial transactions have not been directly assessed. Therefore, the expenditures attributed to that category should be interpreted with caution.

Institutional LTSS users and expenditures by delivery system. FFS delivery of institutional services was more common than delivery through managed care (57.6 percent for FFS versus 47.8 percent for managed care), and it made up a greater share of total institutional expenditures (63.6 percent for FFS versus 36.3 percent for managed care).

Figure 2. Distribution of Medicaid institutional users and expenditures by category, 2021



Source: Mathematica's analysis of the 2021 TAF Release 1.

Note: Mental health facility DSH payments are included in the expenditure calculation, but not the user counts, as they cannot be linked to specific Medicaid enrollees. In addition, the quality and completeness of the TAF data on mental health facility DSH payments and other financial transactions have not been directly assessed. Therefore, the expenditures attributed to that category should be interpreted with caution. Alabama's users and expenditures data were excluded from 2021 calculations due to data quality concerns.

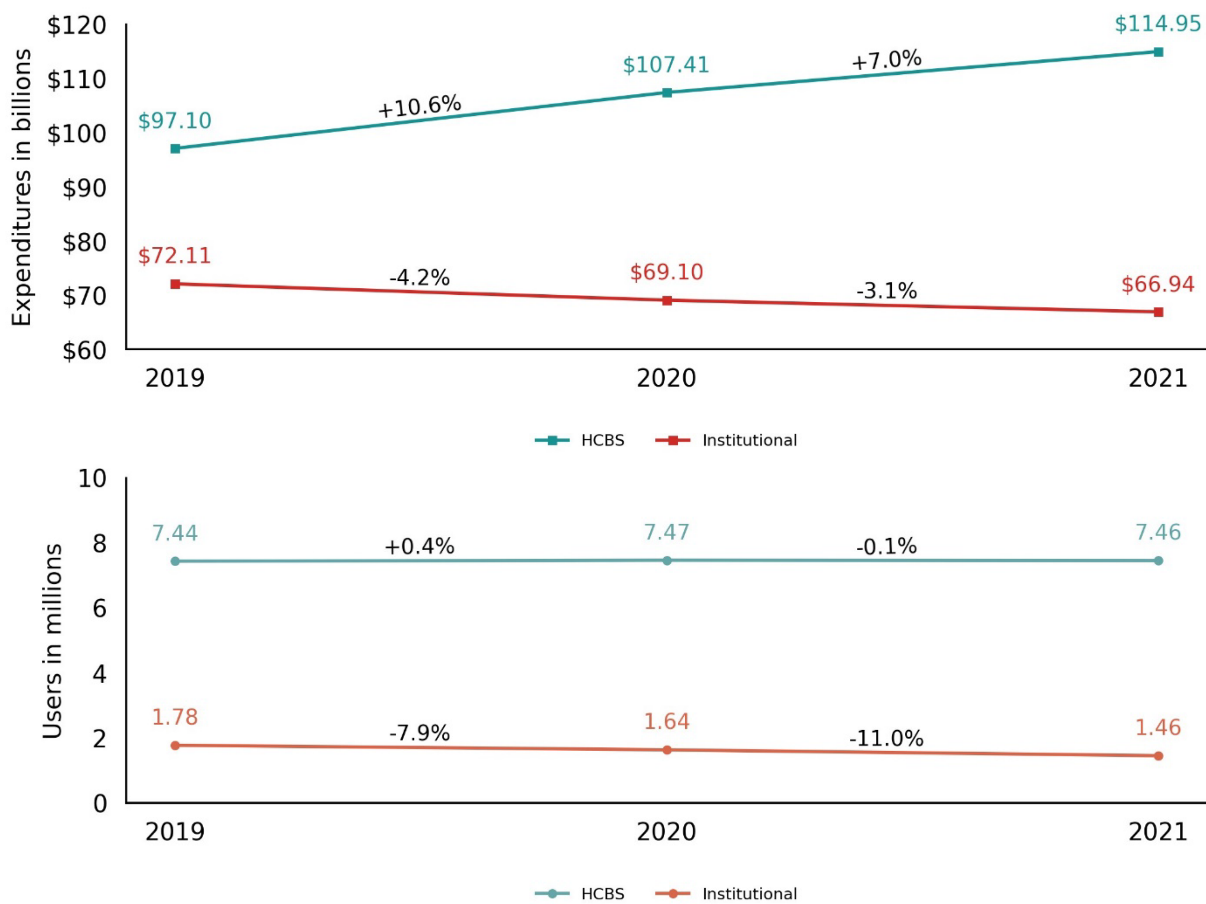
DSH = disproportionate share hospital; ICFs/IID = intermediate care facilities for individuals with intellectual disabilities; TAF = Transformed Medicaid Statistical Information System Analytic File.

Trends in LTSS users and expenditures, 2019–2021

LTSS user and expenditure trends by category. Nationwide, the number of HCBS users increased slightly (from 7.4 to 7.5 million) and the number of institutional service users decreased by 18.0 percent (from 1.8 to 1.5 million) from 2019 to 2021 (Figure 3). Similarly, expenditures for HCBS increased by 18.4 percent (from $97.1 to $115.0 billion) and expenditures for institutional services decreased by 7.2 percent (from $72.1 to $66.9 billion).

HCBS categories with the largest percentage of increases in users were section 1915(i) HCBS state plan option (from 17,789 to 355,524).[17] and section 1915(j) self-directed PAS.[18] (from 211,902 to 517,901). The same two categories also had the largest percentage of increases in HCBS expenditures from 2019 to 2021: section 1915(i) HCBS state plan option expenditures increased from $0.2 to $12.2 billion and section 1915(j) self-directed PAS expenditures increased from $2.9 to $11.9 billion. HCBS categories that experienced decreases in users and expenditures from 2019 to 2021 included state plan case management services, state plan personal care services, and state plan home health services. All institutional categories experienced decreases in users and expenditures from 2019 to 2021. Most notably, users of nursing facility services decreased by 19.2 percent (from 1,573,534 to 1,271,428) and expenditures for nursing facility services decreased by 7.1 percent (from $59.3 to $55.1 billion).

Figure 3. Medicaid HCBS and institutional LTSS users and expenditures, 2019–2021



Source: Mathematica's analysis of the 2019 TAF Release 2, 2020 TAF Release 1, and 2021 TAF Release 1.

[17] We identified section 1915(i) HCBS state plan option users and expenditures for New York in 2021 but not 2019, which was a large contributor to the change in section 1915(i) HCBS state plan option users and expenditures between the two years.

[18] Based on data quality checks and feedback from states, relative to other categories, many states misreported data on section 1915(j) self-directed PAS option claims, resulting in higher counts than expected; therefore, counts and expenditures for this category should be interpreted with caution.

Note: Alabama's users and expenditures data were excluded from 2021 calculations due to data quality concerns. We rounded the values to two decimal places in the figure, but calculations were done using unrounded values.

HCBS = home and community-based services; TAF = Transformed Medicaid Statistical Information System Analytic File.

LTSS user and expenditure trends by delivery system. Nationwide, the number of users who received LTSS through FFS decreased by 11.2 percent (from 4.5 to 4.0 million) and the number of users who received LTSS through managed care increased by 2.2 percent (from 5.1 to 5.2 million). Similarly, expenditures for LTSS delivered through FFS increased by 3.0 percent (from $109.4 to $112.7 billion) and expenditures for LTSS delivered through managed care increased by 15.7 percent (from $59.7 to $69.1 billion).

From 2019 to 2021, the number of users who received HCBS through FFS decreased by 8.7 percent and those who received HCBS through managed care increased by 5.8 percent, respectively). In contrast, expenditures for HCBS delivered through FFS and managed care both increased (12.1 percent versus 29.9 percent, respectively).

From 2019 to 2021, the number of institutional service users decreased at similar rates by delivery system type. Users of institutional services delivered through FFS decreased by 20.6 percent (from 1,061,787 to 843,037) and users of institutional services delivered through managed care decreased by 17.3 percent (from 845,541 to 698,957). Similarly, FFS expenditures for institutional services decreased by 9.0 percent (from $46.8 to $42.6 billion) and managed care expenditures for institutional services decreased by 3.6 percent (from $25.2 to $24.3 billion).

Conclusions

Far more people received HCBS than institutional services in 2021 and HCBS expenditures accounted for a higher proportion of LTSS spending than institutional services. States used a combination of different programs and state plan options to deliver these services, with state plan home health services as the most common among HCBS users, section 1915(c) waiver program services as the largest HCBS expenditure category, and nursing facility users and expenditures comprising the majority of institutional users and expenditures. Although fewer users received LTSS through FFS than managed care in 2021 (4.0 million and 5.2 million, respectively), the majority of LTSS expenditures were for services delivered through FFS ($112.7 billion or 62.0 percent). These trends suggest that although the use of managed care to deliver LTSS has increased considerably over time, FFS is still a substantial delivery model for LTSS.

Methods

This brief contains a snapshot of the LTSS user and expenditure output, focusing on trends in HCBS and institutional users and expenditures by service category from 2019 to 2021. All LTSS user and expenditure calculations for 2019 to 2021 are based on the TAF. For the analyses, institutional LTSS include nursing facilities, ICFs/IID, and mental health facilities. For expenditures only, institutional LTSS also include DSH payments to mental health facilities. HCBS include section 1915(c) waiver programs, section 1915(i) HCBS state plan option, section 1915(j) self-directed PAS option, section 1915(k) Community First Choice, PACE, state plan personal care services, state plan home health services, state plan rehabilitative services, state plan case management services, and state plan private duty nursing services. We reported Money Follows the Person demonstration services as an individual category in accompanying table output but did not include them in the aggregate calculations of total HCBS or total LTSS expenditures or users. Except for PACE expenditures and DSH payments to mental health facilities, LTSS expenditures include fee-for-service (FFS) expenditures, managed care plan payments to providers for managed care services, and supplemental wraparound payments that are add-on payments associated with a specific beneficiary above the negotiated per-service rate and are distinct from supplemental payments made under the Upper Payment Limit (UPL) demonstration. We assigned these expenditures to a specific LTSS category based on relevant TAF claim codes, including type of service, benefit type, program type, and waiver type. For PACE expenditures, we used capitation payment records and service-tracking claims; for DSH payments to mental health facilities, we used service-tracking claims and supplemental payment records. Except for PACE, we identified LTSS users for each LTSS category using FFS claims and managed care encounters, based on the same codes used to identify claims for the expenditure calculations. For PACE user counts, we identified enrollees based on enrollment records. Except for dual-eligibility status, which is based on the majority of enrolled months, we based the characteristics of enrollees on the most recent valid values in the calendar year.

In addition, see the following resources:

- More information on data and methods can be found in the accompanying document titled “Methodology for Identifying Medicaid Long-Term Services and Supports Expenditures and Users, 2019–2021.”
- State data and anomaly notes are included in the accompanying document titled “Data Notes for Medicaid TAF Long-Term Services and Supports Annual Expenditures and Users, 2019–2021.”
- Data tables for 2019–2021 are available at **https://www.medicaid.gov/medicaid/long-term-services-supports/reports-evaluations/index.html.**

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