

# Medicaid Long-Term Services and Supports Users and Expenditures by Service Category, 2022

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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 2022, based on data from the Transformed Medicaid Statistical Information System (T-MSIS) Analytic Files (TAF).<sup>2,3</sup> It also describes trends in HCBS and institutional users and expenditures between 2021 and 2022.<sup>4</sup>

### Key findings

- In 2022, 7.8 million HCBS users accounted for \$129.4 billion in HCBS spending. HCBS users and expenditures increased by 5.1 percent and 12.5 percent, respectively, from 2021 to 2022.
- In 2022, 1.5 million institutional service users accounted for \$71.0 billion in institutional spending. Institutional users and expenditures increased by 0.8 percent and 6.1 percent, respectively, from 2021 to 2022.
- Fee-for-service (FFS) accounted for 45.8 percent of LTSS users and 62.6 percent of LTSS expenditures in 2022, whereas managed care accounted for 60.2 percent of LTSS users and 37.4 percent of LTSS expenditures.<sup>1</sup>

The following 10 HCBS categories used in this analysis align with the services eligible for a temporary increase of 10 percentage points in the federal medical assistance percentage (FMAP) under section 9817 of the American Rescue Plan Act of 2021 (ARP):<sup>5</sup> section 1915(c) waiver programs; the section 1915(i) HCBS state plan option; section 1915(j) self-directed personal assistance services (PAS) option; section 1915(k) Community First Choice; the Program of All-Inclusive Care for the Elderly (PACE); state plan

<sup>1</sup> 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.

<sup>2</sup> When interpreting findings, please note that the completeness, quality, and consistency of TAF data vary 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.

<sup>3</sup> For more information on the user and expenditure rebalancing ratios, refer to “Trends in Users and Expenditures for Home and Community-Based Services as a Share of Total Medicaid LTSS Users and Expenditures,” available at <https://www.medicaid.gov/medicaid/long-term-services-supports/reports-evaluations/index.html>.

<sup>4</sup> The analysis excluded Alabama’s 2021 LTSS measures due to concerns about the quality of the TAF data used in the calculations. Specifically, the analysis suppresses Alabama’s state-level LTSS measures and excludes the state’s data from all national calculations for 2021, which is used as a comparison year in this brief.

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

personal care services; state plan home health services; state plan rehabilitative services; state plan case management services; and state plan private duty nursing services.<sup>6</sup>

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

## Distribution of Users and Expenditures by HCBS Category

**HCBS users by category.** Nationwide, 7,845,187 people received HCBS in 2022 through a variety of Medicaid HCBS waiver programs and state plan options.<sup>10</sup> The largest share of HCBS users received state plan rehabilitative services (2,370,845, or 30.2 percent); state plan home health services (2,366,700, or 30.2 percent); state plan case management services (1,763,778, or 22.5 percent); and section 1915(c) waiver program services (1,759,329, or 22.4 percent) (Figure 1). Fewer HCBS users received HCBS through other programs and options, including state plan personal care services (852,984, or 10.9 percent); the section 1915(j) self-directed PAS option.<sup>11</sup> (593,924, or 7.6 percent); the section 1915(i) HCBS state plan option 425,429, or 5.4 percent); section 1915(k) Community First Choice (162,815, or 2.1 percent); PACE (79,413, or 1.0 percent); and state plan private duty nursing services (66,711, or 0.8 percent).

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<sup>6</sup> We assigned each claim to one category, with program-based services, for which enrollment information exists, assigned first (including 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), followed by state plan services. State plan benefits refer to section 1905(a) state plan services. 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 part of section 9817 of the ARP.

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

<sup>8</sup> Data for mental health facilities included institutions for mental disease (IMDs) for people ages 65 and older and inpatient psychiatric facilities for people younger than 21. In addition, data on mental health facilities may have included services furnished in accordance with section 1915(l) of the Act - services provided to Medicaid beneficiaries aged 21 through 64 who have at least one substance use disorder diagnosis and reside in an eligible IMD. Some states cover services for adults ages 21 to 64 receiving inpatient treatment in IMDs through section 1115 demonstration authority or as an "in lieu of service or setting" (ILOS) under managed care in accordance with 42 CFR 438.3(e)(2) and 438.6(e); however, we could not 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. Hospitals are not included in the definition of institutional LTSS; although, these are Medicaid facilities. CMS has not historically counted hospitals as part of institutional LTSS for tracking LTSS expenditures and use.

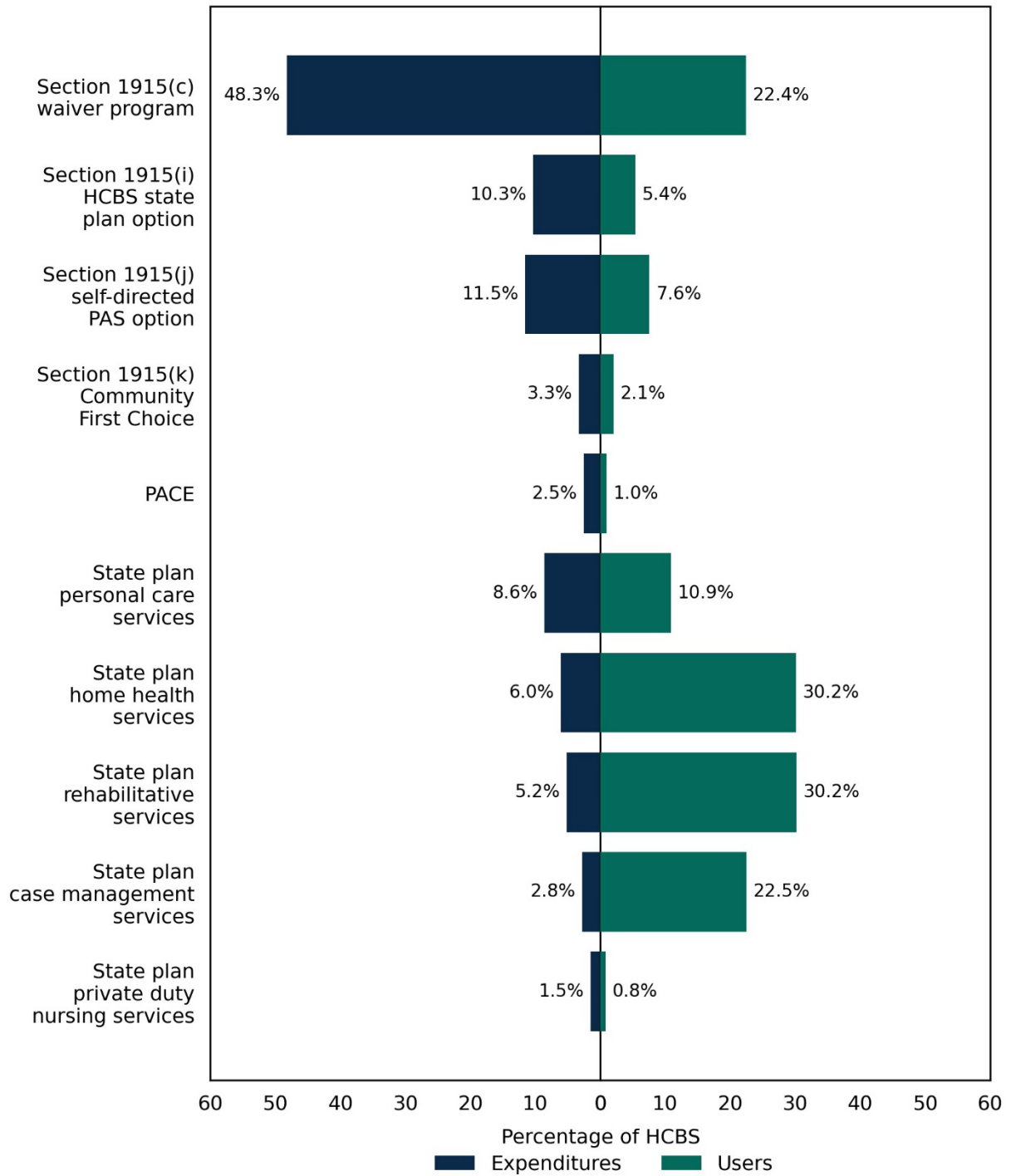
<sup>9</sup> As required by federal law, state Medicaid agencies distribute DSH payments to institutions that serve a large number of Medicaid beneficiaries and people without insurance to support the institutions' financial stability. These direct provider payments can be viewed as part of a state's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

<sup>10</sup> 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.

<sup>11</sup> Based on data quality checks and feedback from states, relative to other categories, many states misreported data on users of the section 1915(j) self-directed PAS option, so counts and expenditures for this category should be interpreted with caution.

**HCBS expenditures by category.** The ordering of HCBS categories by expenditures is much different from the ordering of categories by user counts. This could be due to the cost of services per unit, different populations served, and variation in the intensity and duration of services for different categories of HCBS (Figure 1). These factors result in larger variation across the categories for expenditures. HCBS expenditures totaled \$129.4 billion nationwide in 2022, with the largest share for people receiving section 1915(c) waiver program services (\$62.4 billion, or 48.3 percent). Much smaller shares of HCBS expenditures went toward the section 1915(j) self-directed PAS option (\$14.9 billion, or 11.5 percent); the section 1915(i) HCBS state plan option (\$13.3 billion, or 10.3 percent); state plan personal care services (\$11.2 billion, or 8.6 percent); state plan home health services (\$7.8 billion, or 6.0 percent); state plan rehabilitative services (\$6.7 billion, or 5.2 percent); section 1915(k) Community First Choice (\$4.2 billion, or 3.3 percent); state plan case management services (\$3.6 billion, or 2.8 percent); PACE (\$3.2 billion, or 2.5 percent); and state plan private duty nursing services (\$1.9 billion, or 1.5 percent).

**Figure 1.** Distribution of Medicaid HCBS users and expenditures by category, 2022



Source: Mathematica’s analysis of the 2022 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.

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.** More HCBS users received services through managed care (62.4 percent) versus FFS (43.2 percent).<sup>12</sup> However, HCBS delivered through FFS accounted for a higher proportion of expenditures (62.0 percent for FFS versus 38.0 percent for managed care).<sup>13</sup>

## Distribution of Users and Expenditures by Institutional Category

**Institutional service users by category.** Far fewer people (1,474,778 users) received institutional services than HCBS in 2022. There were 81.2 percent fewer users of institutional services than HCBS. The vast majority of people using institutional care received services at nursing facilities (1,281,127, or 86.9 percent) (Figure 2).<sup>14</sup> Fewer people received services at mental health facilities (137,368, or 9.3 percent) or at ICFs/IID (71,659, or 4.9 percent).

**Institutional LTSS expenditures by category.** Expenditures for institutional LTSS totaled \$71.0 billion nationwide in 2022, 45.1 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 (\$59.1 billion, or 83.2 percent) (Figure 2). Although mental health facility users outnumbered ICF/IID users, expenditures were higher for services at ICFs/IID (\$9.2 billion, or 12.9 percent). Mental health facility expenditures were a small share of total institutional expenditures (\$2.6 billion, or 3.7 percent), and mental health facility DSH payments.<sup>15</sup> accounted for about \$89.4 million, or 0.1 percent of total institutional expenditures.

**Institutional LTSS users and expenditures by delivery system.** FFS delivery of institutional services was more common than delivery through managed care (58.2 percent versus 47.5 percent), and FFS delivery made up a greater share of total institutional expenditures (63.5 percent versus 36.3 percent).

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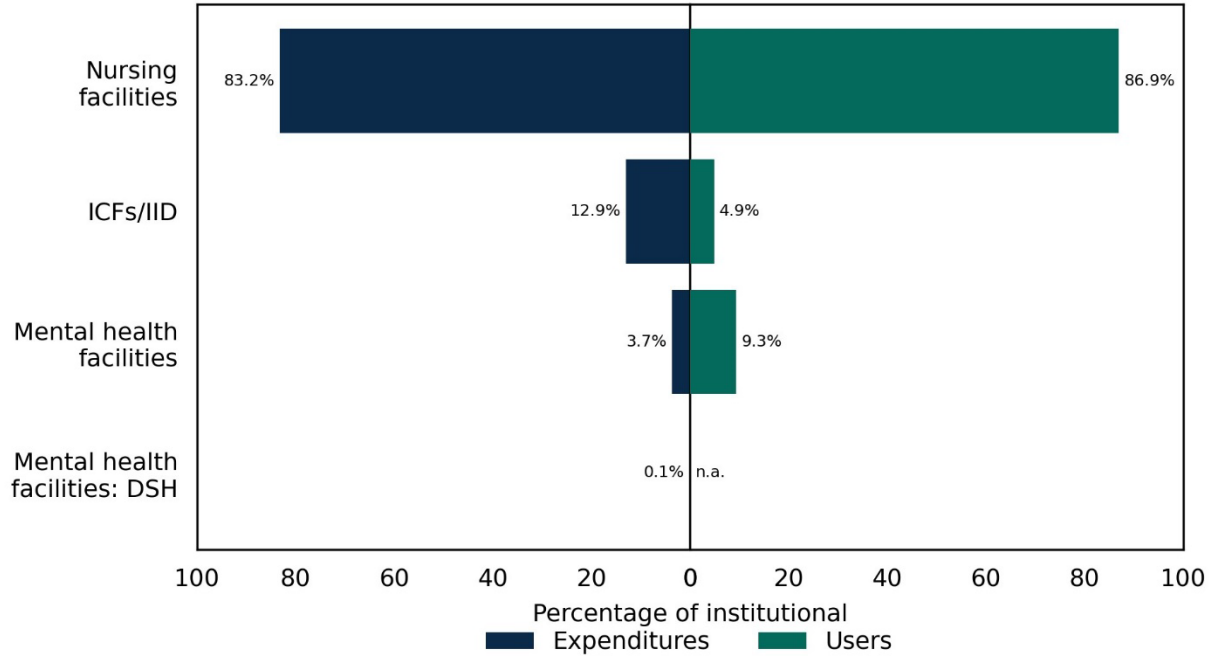
<sup>12</sup> The percentage of users who received HCBS through FFS versus managed care does not sum to 100 because some beneficiaries received both FFS and managed care services at some point during the year.

<sup>13</sup> 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.

<sup>14</sup> 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.

<sup>15</sup> We have not directly assessed the quality and completeness of TAF data on mental health facility DSH payments and other financial transactions. Therefore, the expenditures attributed to that category should be interpreted with caution.

**Figure 2.** Distribution of Medicaid institutional users and expenditures by category, 2022



Source: Mathematica’s analysis of the 2022 TAF Release 1.

Note: Expenditure calculations include mental health facility DSH payments but the user counts do not include these payments, as they cannot be linked to specific Medicaid enrollees. In addition, we have not directly assessed the quality and completeness of the TAF data on mental health facility DSH payments and other financial transactions. Therefore, the expenditures attributed to that category should be interpreted with caution.

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

**LTSS user and expenditure trends by category.** The balance of LTSS continued to shift toward HCBS from 2019 to 2022, as users and expenditures for HCBS increased and users and expenditures for institutional LTSS declined from 2019 to 2021 before increasing in 2022 (Figure 3). From 2021 to 2022 alone, the number of HCBS users rose 5.1 percent (from 7.5 to 7.8 million), while the number of institutional service users rose only 0.8 percent (from 1.46 to 1.47 million). Expenditures for HCBS increased by 12.5 percent (from \$115.0 to \$129.4 billion), whereas expenditures for institutional services increased by 6.1 percent (from \$66.9 to \$71.0 billion).

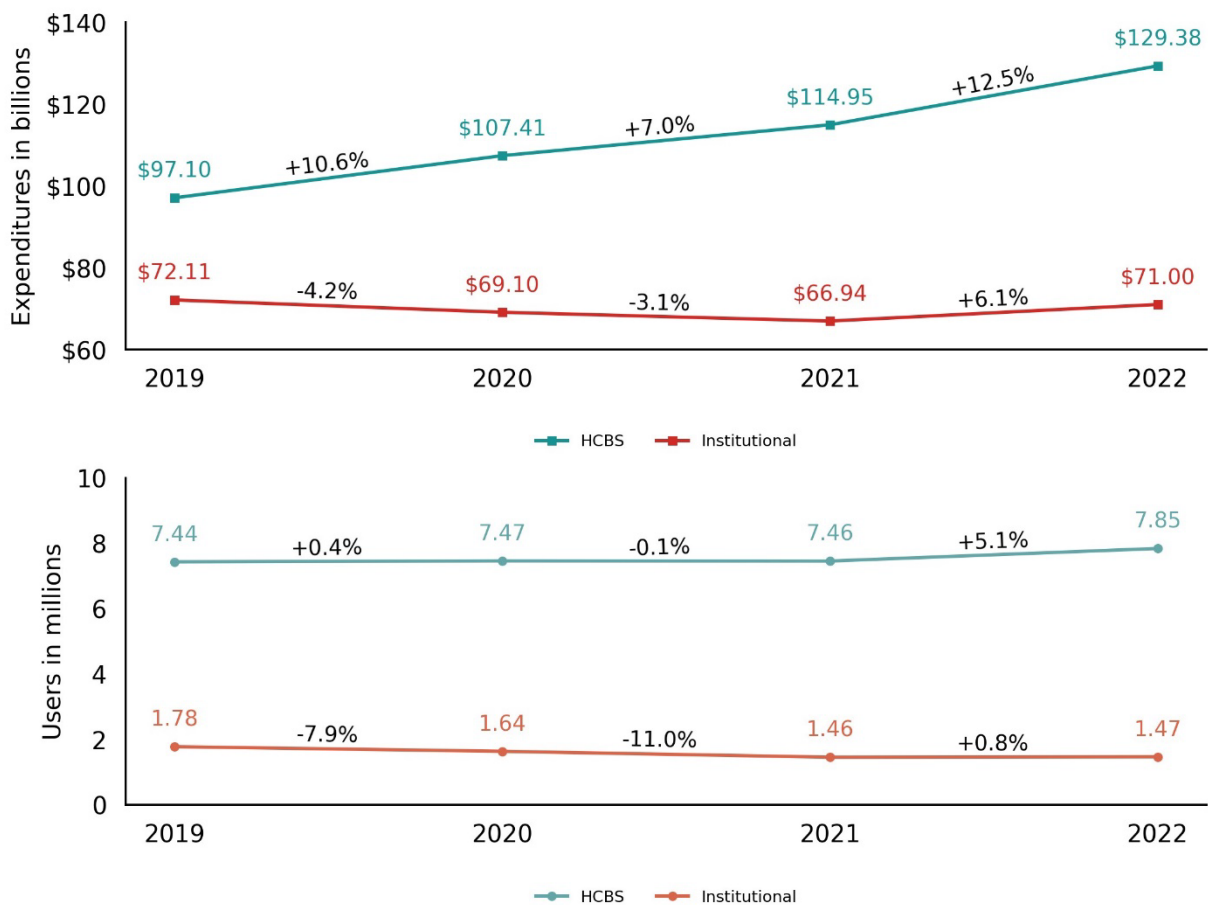
From 2021 to 2022, the HCBS categories with the largest percentage of increases in users were state plan private duty nursing services (24.4 percent, from 53,624 to 66,711); the section 1915(i) HCBS state plan option (19.7 percent, from 355,524 to 425,429);<sup>16</sup> and the section 1915(j) self-directed PAS option (14.7 percent, from 517,901 to 593,924). In the same period, the HCBS categories with the largest percentage of

<sup>16</sup> We identified section 1915(i) HCBS state plan option users and expenditures for New York in 2022 but not in 2019. This was a major contributor to the change in section 1915(i) HCBS state plan option users and expenditures during that time.

increases in HCBS expenditures were the section 1915(j) self-directed PAS option.<sup>17</sup> (25.6 percent, from \$11.9 billion to \$14.9 billion) and section 1915(k) Community First Choice (24.5 percent, from \$3.4 to \$4.2 billion). None of the HCBS categories had decreases in users or expenditures from 2021 to 2022.

Two institutional categories had increases in users and expenditures from 2021 to 2022. Users of nursing facility services rose 0.8 percent (from 1.27 to 1.28 million), and users of mental health facility services rose 3.8 percent (from 132,299 to 137,368). Likewise, expenditures for nursing facility services rose 7.2 percent (from \$55.1 to \$59.1 billion), and expenditures for mental health facility services rose 7.8 percent (from \$2.4 to \$2.6 billion). In contrast, users of ICF/IID services fell by 3.8 percent (from 74,498 to 71,659), and expenditures fell by 1.4 percent (from \$9.3 billion to \$9.2 billion).

**Figure 3.** Medicaid HCBS and institutional LTSS users and expenditures, 2019–2022



Source: Mathematica’s analysis of the 2022 TAF Release 1. We obtained data for 2019 to 2021 from Stepanczuk, Cara, Michelle Eckstein, Aparna Kachalia, Alexandra Carpenter, and Andrea Wysocki. “Medicaid Long-Term Services and Supports Use and Expenditures by Service Category, 2019–2021.” Mathematica, July 24, 2024.

Note: Due to data quality concerns, national user and expenditure calculations for 2021 exclude Alabama’s data. HCBS = home and community-based services; TAF = Transformed Medicaid Statistical Information System Analytic File.

<sup>17</sup> 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.

**LTSS user and expenditure trends by delivery system.** From 2021 to 2022, the number of users nationwide who received LTSS through FFS increased by 4.0 percent (from 4.0 to 4.2 million), and the number of users who received LTSS through managed care increased by 4.6 percent (from 5.2 to 5.5 million). Expenditures for LTSS delivered through FFS rose by 11.2 percent (from \$112.7 to \$125.3 billion), and expenditures for LTSS delivered through managed care rose by 8.5 percent (from \$69.1 to \$74.9 billion).

From 2021 to 2022, the number of users who received HCBS increased at similar rates by delivery system: the number receiving HCBS through FFS rose by 4.4 percent, and the number receiving HCBS through managed care rose by 4.8 percent. Expenditures for HCBS delivered through FFS and managed care also both increased (14.4 percent and 9.7 percent, respectively).

From 2021 to 2022, the number of institutional service users increased slightly for both delivery system types. Users of institutional services delivered through FFS rose by 1.8 percent (from 843,037 to 858,131), and users of institutional services delivered through managed care rose by 0.1 percent (from 698,957 to 699,882). FFS expenditures for institutional services increased by 5.9 percent (from \$42.6 to \$45.1 billion), and managed care expenditures for institutional services increased by 6.3 percent (from \$24.3 to \$25.8 billion).

## Conclusions

Far more people received HCBS than institutional services in 2022, and HCBS expenditures accounted for a larger share of LTSS spending than institutional services. States used a combination of different programs and state plan options to deliver these services. State plan rehabilitative services were the most common among HCBS users, section 1915(c) waiver program services comprised the largest HCBS expenditure category, and nursing facility users and expenditures accounted for the majority of institutional users and expenditures. Although fewer users received LTSS through FFS than through managed care in 2022 (4.2 million and 5.5 million, respectively), most LTSS expenditures were for services delivered through FFS (\$125.3 billion, or 62.6 percent). These trends suggest that although the use of managed care to deliver LTSS has grown considerably over time, FFS is still a major delivery model for LTSS.



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## Methods

This brief contains a snapshot of LTSS user and expenditure output, focusing on trends in HCBS and institutional users and expenditures by service category. All LTSS user and expenditure calculations are based on TAF data. For this analyses, institutional LTSS include nursing facilities, ICFs/IID, and mental health facilities. Hospitals are not included in the definition of institutional LTSS, although these are Medicaid facilities. For expenditures only, institutional LTSS also include DSH payments to mental health facilities. HCBS include section 1915(c) waiver programs, the section 1915(i) HCBS state plan option, the section 1915(j) self-directed PAS option, section 1915(k) Community First Choice, the 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 these services 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 FFS expenditures, managed care plan payments to providers for managed care services, and supplemental wraparound payments that are associated with a specific beneficiary above the negotiated per-service rate; these add-on payments are distinct from the 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, refer to 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, 2022.”
  - 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, 2022.”
  - Data tables for 2022 are available at <https://www.medicaid.gov/medicaid/long-term-services-supports/reports-evaluations/index.html>.
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