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Predictors of Nursing Facility Entry by Medicaid-Only Older Adults and Persons With Disabilities in California

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Abstract

Nearly one-third of adult Medicaid beneficiaries who receive long-term services and supports (LTSS) consist of older adults and persons with disabilities who are not eligible for Medicare. Beneficiaries, advocates, and policymakers have all sought to shift LTSS to home and community settings as an alternative to institutional care. We conducted a retrospective cohort study of Medicaid-only adults in California with new use of LTSS in 2006-2007 (N = 31 849) to identify unique predictors of entering nursing facilities versus receiving Medicaid home and community-based services (HCBS). Among new users, 18.3% entered into nursing facilities, whereas 81.7% initiated HCBS. In addition to chronic conditions, functional and cognitive limitations, substance abuse disorders (odds ratio [OR] 1.35; 95% confidence interval [CI]: 1.23, 1.48), and homelessness (OR: 4.35, 9% CI: 3.72, 5.08) were associated with higher odds of nursing facility entry. For older adults and persons with disabilities covered by Medicaid only, integration with housing and behavioral health services may be key to enabling beneficiaries to receive LTSS in noninstitutional settings.

Keywords

Medicaid, long-term services and supports, home and community-based services, skilled nursing facilities

1. What do we already know about this topic?

Among older adults who are dually eligible for Medicare and Medicaid coverage, functional and cognitive limitations, chronic disease severity, living alone and white race are associated with admission to nursing facilities for long-term services and supports.

2. How does your research contribute to the field?

The research indicates that among adults eligible for Medicaid coverage only, who are relatively younger and have fewer chronic conditions and functional limitations, homelessness and substance use disorders were associated with nursing facility admission.

3. What are your research's implications toward theory, practice, or policy?

Without additional supports, such as housing, treatment for substance use disorders, and integration with mental health services, efforts that shift care away from nursing facility use may be unrealistic or insufficient for many Medicaid-only adult beneficiaries.

Introduction

Medicaid is the largest US payer, public or private, of long-term services and supports (LTSS), spending over $121 billion in 2014.[1] Policymakers have sought to curb Medicaid LTSS expenditures by rebalancing care toward lower-cost home and community-based services (HCBS) as an alternative to institutional care.[2] Furthermore, rebalancing care toward HCBS reflects beneficiary preferences to receive LTSS in home and community settings and in line with the Supreme Court *Olmstead* decision.[2] For policymakers aiming to support HCBS use, it is key to understand the characteristics of the population that continues to enter nursing facilities even when HCBS is available as a Medicaid benefit.

Literature Review

Extensive research has examined nursing facility utilization among in the United States. A meta-analysis using pooled data from 12 data sources on older adults found that limitations in

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3 or more activities of daily living (ADL), cognitive impairment, and prior nursing home use were the strongest predictors of admission.[3] Older age, white race, male, single (rather than married), living alone, Medicaid eligible, and disease condition were also positive predictors. A more recent profile of nursing home residents admitted from home found similar characteristics associated with conversion from a short- to long-term nursing facility stay, as well as depression and behavioral problems.[4] Because these studies addressed the older adult population at large, they did not examine use of HCBS as an alternative benefit under Medicaid.

Additional research has examined nursing facility versus HCBS by beneficiaries who are dually eligible for Medicaid and Medicare. Those initiating HCBS are on average younger and more ethnically diverse, with fewer chronic health conditions and fewer ADL limitations.[5] Racial and ethnic minorities are not only more likely to use HCBS, but when they are admitted to nursing facilities, they have greater functional and cognitive limitations.[6] As expected, nursing home case mix is thus higher than HCBS case mix.[7]

In contrast to the large body of research on the dual-eligible population, relatively little has addressed the group of older adults and persons with disabilities who are eligible for Medicaid only. This population merits greater investigation as Medicaid-only beneficiaries account for 32% of all LTSS users covered by Medicaid.[8] Adult Medicaid-only beneficiaries include older adults with limited work histories, such as those with infrequent work outside the home, and immigrants who arrived past their working years. Persons with disabilities who have Medicaid but not Medicare coverage include those with partial or temporary disability that does not meet Medicare disability requirements, or are awaiting permanent determination for Medicare eligibility, a process requiring 2 years.[8]

Relative to dual-eligible beneficiaries, Medicaid-only beneficiaries are on average younger, have fewer chronic conditions, functional and cognitive limitations.[9] Medicaid-only beneficiaries have high rates of mental illness (an estimated 47% of those with disabilities), as well as central nervous system disorders and substance use disorders.[10] They also have a higher poverty rate- nearly half of those with disabilities receive Supplemental Nutrition Assistance, ie, food stamps.[11] Medicaid-only beneficiaries may thus have a different set of health and social needs relative to dual-eligibles, and this may affect their patterns of LTSS utilization.

When comparing Medicaid-only versus dual-eligible older adults who use LTSS, Medicaid-only LTSS users are more often younger, male, minorities, living in urban areas, and diagnosed with fewer chronic conditions.[12] Among all Medicaid-only beneficiaries who use LTSS (including children), 79% use HCBS, 18% use nursing facilities, and 3% use both.[8] In one study of Medicaid-only admissions to nursing homes, Thomas et al found that local spending on HCBS was associated with lower rates of admissions among beneficiaries with disabilities under age 65.[13] No research to date has examined individual predictors of entry to nursing facility versus HCBS in this population.

In this study, we examined Medicaid-only older adults and persons with disabilities who are newly entering nursing facilities or receiving HCBS in California. We focused on California because the size of the state enables an empirical examination of a diverse Medicaid-only population, while holding constant potentially confounding state-level policy and program factors that vary in multistate studies. This is particularly salient to the Medicaid-only population, as states differ in eligibility requirements in both income and disability determination, as well as benefits under state plans and 1915(c) waivers.[8] Other studies have found state-level spending on HCBS is associated with likelihood of nursing facility admission.[14,15]

This study design focuses on the role of beneficiary characteristics on LTSS use, when all beneficiaries are eligible for the same set of LTSS benefits. Furthermore, California HCBS benefits, including consumer-directed personal care assistance, have been available as a state plan benefit for over 25 years, and can thus inform states that have more recently broadened the scope of Medicaid LTSS. Finally, the diversity of the California population- across geography, race and ethnicity- can provide insights for other states in which diversity, particularly among the older adult population, is on the rise.

In order to support the use of HCBS among Medicaid-only adult beneficiaries, it is important to understand what factors contribute to the new use of nursing facilities. Therefore, we attempted to identify characteristics associated with a nursing facility stay. versus use of HCBS, among Medicaid beneficiaries initiating LTSS. We focused on factors with greater salience among this population, including mental illness, central nervous system and substance use disorders. In consideration of both the high poverty rate in this population, and the necessity of stable housing in order to receive HCBS, we also examined the relationship between homelessness and nursing facility entry. For the purposes of this study we only considered nursing facility stays which were not for the purpose of short term rehabilitation but for what was anticipated to be an extended need.

Methods

Study Population

We selected the study sample from California adults (ages 19 and above) who were eligible for Medicaid in 2006-2007, excluding: dual-eligibles, those with Medicaid eligibility due to time-limited circumstances (eg, emergency care, family benefit), and those with developmental disabilities; the resulting study population consisted of Medicaid-eligible adults. From this we identified N= 31 849 beneficiaries with new LTSS use (as defined below).

Data Sources

We used the Medicaid eligibility data files provided by the California Department of Health Care Services to identify the Medicaid-only population and obtain information on beneficiary age, sex, race and ethnicity. We linked eligibility files to Medicaid claims data to identify both prevalent and incident HCBS and nursing facility use and diagnosis codes. We further linked statewide hospital discharge data (Office of Statewide Planning and Development Patient Discharge Database) to supplement claims data on diagnosis codes, and assessment data on housing status.

We obtained functional and cognitive ability measures and living arrangement data from the state Case Management Information and Payrolling System (CMIPS) for those receiving HCBS, the Minimum Data Set (MDS) for those entering nursing facilities, Outcome and Assessment Information Set (OASIS) used for those receiving home health care, and Inpatient Rehabilitation Facility Patient Assessment Instrument (IRF/PAI) for those discharged from rehabilitation hospitals. Cognitive limitation was defined as requiring at least verbal assistance, supervision, or cueing due to limitations in memory, orientation, or judgment items in the CMIPS and MDS instruments.

Measures

Our primary outcome of interest was whether a beneficiary entered into a nursing facility for an extended stay, with use of HCBS as the reference alternative. We defined LTSS use as either receipt of Medicaid HCBS or an extended nursing facility stay, at least once during the study period. We defined HCBS as: home health, personal care assistance, community-based adult day health services, targeted case management, and Section 1915(c) home and community-based service waivers. To focus on long-term, rather than acute and rehabilitative services, we defined extended nursing facility stays as those lasting 21 or more consecutive days. We identified new use as extended nursing facility stay or HCBS with no prior use of that service in the preceding 12-months.

We included age, gender, race and ethnicity, and chronic disease burden using the Chronic Illness and Disability Payment System (CDPS) for Medicaid, which consolidates diagnostic codes: higher scores reflect greater morbidity.[16] We used the CDPS-created categories to create indicators for central nervous system, psychological and substance use disorders (see Supplemental Material Tables A3-A5 for a complete list of diagnoses for each category). We categorized functional limitation as having 3 or more limitations in ADL, and we defined cognitive limitation as requiring at least verbal assistance/supervision/cueing due to limitations in memory, orientation, or judgment. We measured living arrangement with an indicator for whether a beneficiary lived alone. We also adjusted for whether a beneficiary was Medically Needy or categorically eligible for Medicaid. Beneficiaries who are eligible for Medicaid under the state Medically Needy program have incomes above categorical limits, and on average greater health care needs and use of nursing facilities.[17]

Analysis

We first described the characteristics of beneficiaries who are new users of each service. We then performed multivariate logistic regression models to estimate the associations between individual characteristics and nursing facility entry rather than HCBS.

Procedures for the privacy protection of recipient identity and service use were approved by the University of California Committee on Human Research (#10-02998) and the California Committee for the Protection of Human Subjects (#12-06-0416). All analyses were conducted using SAS version 9.4 (SAS Institute, Inc, Cary, North Carolina).

Results

In the period of 2006-2007, 26 031 of the 31 849 (81.7%) of Medicaid-only adults who used LTSS received HCBS, with the balance entering nursing facilities. Compared to HCBS users, a higher percentage of nursing facility entrants were non-Hispanic White and aged 55 to 64 years (Table 1). Over 65% had 3 or more limitations in ADL and nearly half had cognitive limitations. Nearly twice the percentage of nursing facility entrants had central nervous system, psychological, and substance use conditions.

In multivariate analyses, older age, male gender, non-Hispanic White race and ethnicity, and Medically Needy eligibility were significantly associated with entering into a nursing facility rather than HCBS (Table 2). A greater burden of chronic disease, central nervous system and psychological conditions, and cognitive limitations were also associated with higher odds of entry into a nursing facility. Substance abuse and living alone were associated with over 35% higher odds. Having 3 or more ADL limitations and being homeless were each associated with over 400% higher odds of nursing facility entry.

We conducted additional analyses with more specific categories of central nervous system, psychological and substance abuse conditions associated with nursing facility admission (Supplemental Material Tables A3-A5). After identifying associations among the specific categories, we estimated models including the corresponding indicators and aggregating the rest. For example, among central nervous system (CNS) disorders, dementia (odds ratio [OR] 2.47; 95% confidence interval [CI] 1.79, 3.41) and movement disorders (OR 1.39; 95% CI 1.17, 1.64) were associated with nursing facility admission, whereas autonomic and inflammatory disorders were not; the dementia and movement disorders were retained in the full model and other CNS disorders were aggregated into a single Other

Table 1. Characteristics of Adult Medicaid-Only Beneficiaries Who Initiated Long-Term Services and Supports: California, 2006-2007.

	HCBS		Nursing facility[a]		Total	
Variables	n = 26 031 (81.7)		n = 5818 (19.3)		n = 31 849	
Age, n (%)						
<45	5373	(20.6)	858	(14.7)	6231	(19.6)
45-54	7945	(30.5)	1702	(29.3)	9647	(30.3)
55-64	9066	(34.8)	2558	(44.0)	11 624	(36.5)
65+	3647	(14.0)	700	(12.0)	4347	(13.6)
Female, n (%)	14 536	(55.8)	2455	(42.2)	16 991	(53.3)
Race/ethnicity, n (%)						
White	10 260	(39.4)	2539	(43.6)	12 799	(40.2)
Hispanic	5162	(19.8)	1110	(19.1)	6272	(19.7)
Black	6119	(23.5)	1198	(20.6)	7317	(23.0)
Asian	2827	(10.9)	442	(7.6)	3269	(10.3)
Other	1663	(6.4)	529	(9.1)	2192	(6.9)
3 or more ADL limitations,[b] n (%)	8495	(32.6)	3788	(65.1)	12 283	(38.6)
Cognitive limitations,[c] n (%)	8846	(34.0)	2760	(47.4)	11 606	(36.4)
CDPS,[d] mean (SD)	1.12	(1.37)	1.54	(1.68)	1.19	(1.44)
Central nervous system condition,[e] n (%)	2293	(8.8)	1044	(17.9)	3337	(10.5)
Psychological condition,[e] n (%)	2016	(7.7)	855	(14.7)	2871	(9.0)
Substance use disorder,[e] n (%)	2608	(10.0)	1115	(19.2)	3723	(11.7)
Living alone, n (%)	6085	(23.4)	1551	(26.7)	7636	(24.0)
Homeless, n (%)	389	(1.5)	447	(7.7)	836	(2.6)
Medically needy, n (%)	5122	(19.7)	2093	(36.0)	7215	(22.7)

Note. HCBS = home and community-based services; ADL = activities of daily living; CDPS = Chronic Illness and Disability Payment System.
[a]*P* values <.0001 for all HCBS versus Nursing Facility recipient comparisons.
[b]Limitations in ADL (bathing, dressing, toileting, transferring, eating, continence).
[c]Limitations in Memory, Orientation, or Judgment requiring assistance, supervision, or cueing.
[d]Chronic Illness and Disability Payment System tool consolidates diagnostic codes into 58 categories and assigns each a score that represents the incremental, prospective expenditure risk associated with that category. Higher scores reflect greater morbidity.[16]
[e]Categorized from diagnostic codes, see Supplemental Materials Tables A3 to A5 for detailed categorization.

CNS disorder category (Supplemental Material Tables A1, A2). Schizophrenia and other diagnoses of psychoses (OR 2.53; 95% CI 2.18, 2.94) and personality disorders (OR 1.63; 95% CI 1.24, 2.13) were also associated with nursing facility admissions, with a weak association for mood disorders (OR 1.12; 95% CI 1.00, 1.26). Within substance abuse, alcohol use (OR 1.49, 95% CI 1.33, 1.66), but not use of other substances (including opioids, other prescription medications, or other illicit drugs), was associated with nursing facility admission. Relationships between ADL limitations, living alone, and being homeless, with nursing facility admission, remained nearly unchanged after including the expanded list of conditions.

Discussion

Among the California Medicaid-only adult population using LTSS, the large majority received HCBS, rather than nursing facility care. Our findings are similar to national estimates on nonelderly beneficiaries with disabilities.[18] In contrast, approximately 50% of dual-eligible beneficiaries using LTSS receive nursing facility care.[18]

As seen in prior studies of dual-eligible beneficiaries, Medicaid-only adults who entered nursing facilities rather than used HCBS tended to be older, of non-Hispanic White race and ethnicity, and have a higher burden of chronic disease, functional and cognitive limitations, and central nervous system conditions.[3,12] Entry into nursing facilities among those with greater frailty and limitations may reflect higher care needs that may be more easily met in institutional settings.

Our finding that racial and ethnic minorities are less likely to enter nursing facilities, even after accounting for health and functional conditions, is consistent with prior research on older adults and dual-eligible beneficiaries suggesting minorities face barriers to care.[3,6] Other recent investigations have found that disparities in nursing facility use are narrowing,[19,20] although it is unclear whether this reflects the greater variety of LTSS options available to non-Hispanic Whites versus a true narrowing of disparities in access.[6] Nursing facility options are limited for those with only Medicaid coverage, and the facilities serving a higher percentage of Medicaid residents have, on average, limited resources and lower quality of care.[21,22] Due to persistent structural inequities and

Table 2. Factors Associated With Extended Nursing Facility Entry Versus Home- and Community-Based Services Among Medicaid-Only Adult Beneficiaries: California, 2006-2007.

	Total entrants	
Independent variables	Odds ratio	95% CI
Age (age <45 reference)		
45-54	1.31***	(1.19, 1.45)
55-64	1.68***	(1.53, 1.84)
65 or more	0.75***	(0.66, 0.85)
Female (y/n)	0.61***	(0.57, 0.65)
Race/Ethnicity		
Hispanic	0.78***	(0.72, 0.85)
Black	0.83***	(0.76, 0.90)
Asian	0.61***	(0.54, 0.69)
Other	1.36***	(1.21, 1.53)
3 or more ADL limitations[a]	3.84***	(3.59, 4.10)
Cognitive limitations[b]	1.60***	(1.50, 1.71)
CDPS[c]	1.00	(0.98, 1.03)
Central nervous system condition[d]	1.47***	(1.33, 1.62)
Psychological condition[d]	1.58***	(1.43, 1.74)
Substance abuse disorder[d]	1.39***	(1.26, 1.53)
Living alone	1.40***	(1.30, 1.51)
Homeless	4.27***	(3.65, 5.01)
Medically Needy	2.56***	(2.37, 2.76)

Note. CI = confidence interval; ADL = activities of daily living; CDPS = Chronic Illness and Disability Payment System.
[a]Limitations in ADL (bathing, dressing, toileting, transferring, eating.
[b]Limitation in Memory, Orientation, or Judgment requiring assistance, supervision or cueing.
[c]Chronic Illness and Disability Payment System tool consolidates diagnostic codes into 58 categories and assigns each a score that represents the incremental, prospective expenditure risk associated with that category. Higher scores reflect greater morbidity.
[d]Categorized from diagnostic codes, see Supplemental Materials Tables A3-A5 for detailed categorization.
***$P < .001$.

disproportionate representation within Medicaid, Medicaid-only minorities may thus have fewer nursing facilities available to them and receive worse care.[20-22]

The association of Medically Needy eligibility with nursing facility admission is consistent with a higher level of health care expenditures relative to income; this group is often described as relying upon costly nursing facility care to "spend down" to gain Medicaid eligibility.[17] But we note that our findings address first entry into LTSS among this population. Therefore, the Medically Needy beneficiaries in this sample do not include those who have become eligible for Medicaid as a result of a long-term nursing facility stay. The observed relationship between Medically Needy and nursing facility admission may more closely reflect the greater levels of illness and disability within this population.

In addition, those with mental illness, substance use disorders, and those who were homeless were also more likely to enter nursing facilities, even after adjusting for other factors. This is consistent with prior evidence that mental illness and behavioral problems are associated with nursing facility admissions,[4,23] and facilities with a high concentration of Medicaid residents also have a higher proportion of residents with psychiatric conditions. We identified a relationship particularly between alcohol use and nursing facility admission. Prior studies have found that nursing facility residents with alcohol use disorders have higher functional abilities but are more likely to have been homeless, diagnosed with comorbid mental illness, and lacking in social support[24]—factors that may contribute to admission despite low nursing care needs. We may not have found associations for other substance use disorders for several reasons, including that the study period precedes the opioid epidemic, the aging of the Baby Boomer population that has increased prevalence of nonalcohol substance use disorders,[25] and lower rates of substance use detection among older adults.[26] It is possible that given the ongoing challenges with access to treatment, we would identify nursing facility admissions associated with substance use disorders with a more contemporary sample.

Implications

It is not surprising that Medicaid beneficiaries with chronic conditions and functional limitations are more likely to enter nursing facilities. However, it is debatable whether skilled nursing facilities are optimal for beneficiaries with complex behavioral and social needs.

For those with mental illness, prior research has also shown that nursing facility residents receive lower quality mental health care.[27] Nearly one quarter of adults below age 65 with severe mental illness have low care status upon admission, again suggesting that nursing facilities are not necessarily appropriate fit for these residents.[23] Although states are required to implement a process for screening of Medicaid beneficiaries for serious mental illness prior to admission, and determination of appropriate placement, past research has found that legislation is weakly enforced.[28] Identifying alternative care settings has historically been hampered by the loss of inpatient psychiatric facilities over time and the exclusion of Medicaid reimbursement for residential care facilities.[23] The Centers for Medicare and Medicaid Services has recently indicated that the restriction on Medicaid reimbursement for treatment in residential care will be waived,[29] potentially improving access to appropriate mental health services rather than nursing facility use. Medicaid beneficiaries (and those who evaluate their care needs) also face the limited availability of community mental health services and tailored LTSS for those with mental illness.[23] Low-income and minority communities, ie, those with a higher proportion of Medicaid beneficiaries, have fewer community mental health centers that accept Medicaid.[30] Furthermore, management of an individual with mental illness in home and community settings without support in these areas can impose considerable burden on caregiving families. This obviates HCBS options that do not

include 8 or more hours of supervision daily. In short, policies should aim for expansion of HCBS benefits in addition to preentry treatment for mental illness.

For those with substance use disorders, most nursing facilities are not equipped to treat these conditions.[31] Alternative treatment options for Medicaid beneficiaries are limited, with particular gaps in rural areas and those with a high percentage of black residents.[32] The supply of publicly funded outpatient substance use treatment centers has been declining, with a countertrend in growth of for-profit centers that do not accept Medicaid.[33] Several state Medicaid programs are testing programs to foster integration of health care with behavioral health services, but these programs have primarily addressed acute, rather than long-term, care.[34-36]

Treatment options for those with comorbid mental illness and substance use disorders are even more scarce. Evidence from Money Follows the Person demonstrations suggest that with appropriate program supports, those with dual diagnoses can successfully transition from nursing facilities to community settings.[37] Our findings support targeting of those with mental illness and substance use disorder needs before nursing facility admission occurs. Two states (Washington and Vermont) have begun programs to serve "pre-Medicaid" beneficiaries—those at risk for Medicaid nursing facility use, to prevent or delay admission.[37]

For Medicaid beneficiaries who are homeless, the lack of housing stability would make receiving HCBS difficult and admission to a nursing facility a preferable option. To reduce acute care costs from emergency department visits and hospital admissions, policymakers have shown greater interest in supportive housing programs, which have a more robust evidence basis for improving outcomes of homeless Medicaid beneficiaries.[38] Our findings suggest that potential benefits from reduced nursing facility use should also be factored into these considerations. Similarly, state demonstrations to facilitate transitions from nursing homes have highlighted the benefits of Medicaid program coordination with housing authorities to foster development of affordable housing, provide transition counselors, housing searches, assistance with rental security deposits, and home modifications;[37] these approaches can also be supported to reduce nursing facility admissions among Medicaid-only beneficiaries. Additional research should explore the potential cost and quality benefits of including housing subsidies as a Medicaid benefit, to foster use of HCBS than nursing facilities.

Finally, states have increasingly moved toward enrollment of older adults and persons with disabilities into Medicaid managed care plans for acute care services. Transition to managed care for these populations was perceived favorably by those who selected plans and negatively by those who were assigned.[39] Demonstration initiatives in 19 states, including California, have turned to managed care plans to guide LTSS utilization as well, and in some cases, required reporting on rebalancing care from nursing facilities to HCBS.[40] Early evidence on the California managed LTSS transition has found dual-eligible beneficiaries have mixed experiences, with some reporting improved and others worsened access to care;[41] for those with LTSS, beneficiaries in managed and nonmanaged LTSS counties continue to report unmet needs.[42] Other states have also reported mixed outcomes from transitioning to managed LTSS; however, all remain early in implementation and evaluation is ongoing.[37] One challenge is that care coordination—particularly between acute care, LTSS, and behavioral health services—remains poorly defined and thus appropriate skill sets and quality of care are difficult to measure.[43] Our findings support the argument that managed care benefits must expand beyond acute and LTSS health care services, and tailored for Medicaid beneficiaries with complex social and behavioral needs. Policymakers should examine whether managed care plans are equipped or properly reimbursed to manage a more complex array of services in addition to LTSS for Medicaid-only beneficiaries.

Limitations

First, we were unable to obtain data on other characteristics, such as family and social support, that are known to influence the use of community versus institutional care. We used living arrangement as a proxy for available social support. Second, we were also unable to account for length of disability, which can impact individual experience with disability severity of disability and likelihood of functional needs and comorbidities. We have restricted our sample to those with no prior LTSS use in the preceding year, to partly reduce heterogeneity in underlying disability severity. Third, our data reflect patterns from 2006-2007: Other factors may influence current LTSS utilization, including differing health and functional needs of those newly eligible for Medicaid, and implementation of managed acute and long-term care services in select California counties. As described in the Introduction, prior description of the Medicaid-only population using LTSS is sparse, and this study provides a baseline for future evaluation. We note that many of the findings are consistent with the larger body of literature on LTSS use among dual-eligibles, and we have no theoretical reason to expect that the associations between the individual characteristics examined in this study would change over time. Last, this study is limited to individuals in California and may be limited in generalizability to other states. However, by focusing on one state, our study emphasizes the importance of individual characteristics in LTSS outcomes when other policy and programmatic factors are held constant. Furthermore, certain benefits (particularly consumer-direction in personal care assistance) were available to California Medicaid beneficiaries in this earlier time period, and thus relevant to states that have more recently adopted these policies.

Conclusion

In recent years, the Medicaid-only population of older adults and persons with disabilities has been growing at a faster rate than the dual-eligible population. Relative to dual-eligibles, Medicaid-only adults with disabilities are less likely to receive LTSS in nursing facilities, but when they do, their annual per-person costs are higher.[18] Nursing facility options are limited for those with only Medicaid coverage, and the facilities serving a greater percentage of Medicaid residents have, on average, limited resources and lower quality of care. Recent evidence suggests nursing facility quality is improving and disparities narrowing, but overall deficiency rates remain high.[44] Our findings reinforce the importance of policies such as higher Medicaid payment rates and staffing standards that support improved quality of care for a high need population.[45,46] Providers, advocates, and policymakers continue to debate on how best to determine when beneficiaries may use HCBS as an alternative to nursing facility care. Our findings suggest that without additional supports, such as housing, treatment for substance use disorders, and integration with mental health services, rebalancing efforts may be unrealistic or insufficient for many Medicaid-only adult beneficiaries.

Declaration of Conflicting Interests

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Supplement Material

Supplement material is available for this article online.

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