Analysis of Occupational Therapy Services in Medicaid Home and Community Based Service (HCBS) Waiver Programs across the United States

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Introduction

Through the work of advocates, amendments to Medicaid, and rulings such as *Olmstead v. L.C.* (1999) the institutional bias has slowly eroded with states now able to provide Medicaid funding to individuals with intellectual and developmental disabilities (IDD) in community based settings (Smith et al., 2000). Prior to these changes, occupational therapy (OT) practitioners treating people with IDD did so within the confines of medical facilities and in-unit settings (Nehring & Lindsey, 2016) with little to no intervention design addressing community integration and participation. With the shift to community living OT practitioners are now using their clinical expertise to identify and develop the skills and abilities of people with IDD as well as the supports and modifications necessary to promote optimal integration and participation in the community (Hammel, Lai, & Heller, 2002). OT services that promote community living include the design and implementation of Activities of Daily Living (ADL) and Instrumental Activities of Daily Living (I/ADL) training, pre/vocational training, community integration programs, environmental interventions, and caregiver training programs (Ideishi, D'Amico, & Jirikowic, 2013). The foundation for these services is grounded within the profession's framework that identifies that OT works to facilitate, promote, and achieve increased occupational engagement in client-centered meaningful ADLs (AOTA, 2014, p. S4; Mahoney, Roberts, Bryze, Kent, 2016).

Medicaid Home and Community Based Services (HCBS)

Each state's Medicaid state plan covers federally mandated basic immediate medical care such as in-patient hospitalization services, short-term skilled nursing or rehabilitation, and doctor services by approved providers. However, many services can vary; for example, dental coverage is not included in many state plans (Friedman, Rizzolo, & Schindler, 2014). States also have the option of providing additional OT services through Medicaid's funding mechanisms for LTSS, which includes care provided within institutional care settings - such as intermediate care facilities – and funding for HCBS.

Established by Congress in 1981, the HCBS waiver program allows states to direct resources to vulnerable populations. HCBS waivers function by allowing states to 'waive' the main provisions of the Social Security Act that previously required institutional based service provision; HCBS waivers instead allow states to provide specialized services permitting individuals to remain in their own home or live in a community setting (U.S. Department of Health and Human Services, 2000).

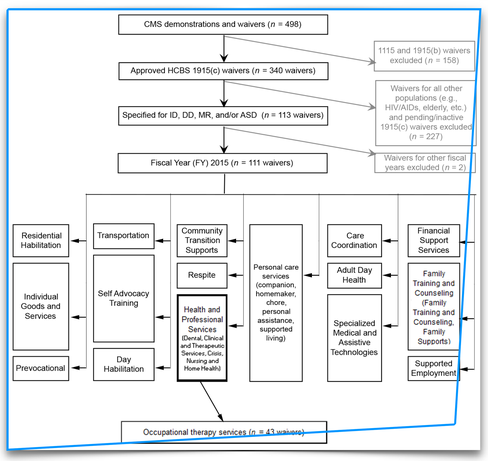
The HCBS waiver aims to increase people with IDD's potential for successful community living, rather than segregated institutional care, through community based services and supports (Rizzolo et al., 2013). In large part because of the HCBS waiver program, the United States has seen a major shift to community living for people with IDD, with a 70% decrease in institutional living between 1977 and 2007 (Spassiani, Parker-Harris, & Hammel, 2015). Today, HCBS waivers are one of the largest providers of LTSS for people with IDD because of their cost-effectiveness, improved community outcomes, and the preferences of people with IDD (Braddock et al., 2015; Rizzolo et al., 2013).

One intricacy of the HCBS waiver program is that states are able to tailor HCBS waivers as they see fit; as a result there is often large variance across states and waivers in terms of what types of services are provided (Friedman, Lulinski, & Rizzolo, 2015; Rizzolo et al., 2013). Therefore, how OT is incorporated into HCBS waivers may be dependent on the presumed value or benefit of OT interventions on the long-term health outcomes of persons with IDD. Yet, OT has many documented benefits for people with IDD. For example, research has found that OT designed interventions incorporating client motivation, choice, and meaningful activity result in increased community and social engagement for people with IDD (Mahoney, 2016). OT services can also facilitate and enable meaningful participation through interventions that enrich the environmental context, and support adaptive behaviors increasing occupational engagement (Channon, 2014; Mahoney & Roberts, 2011; Shikalo-Thomas, Majnemer, Law, & Lach, 2008).

Purpose

There is little research about how OT is utilized through Medicaid LTSS HCBS programs. Comparison across states can inform the OT profession on potential areas for greater emphasis in research, need for program development, and inform future policy efforts. Thus, the aim of this study is to determine how Medicaid HCBS 1915(c) waivers for people with IDD allocate OT services across the nation. To do so, HCBS waivers for people with IDD providing OT services in fiscal year (FY) 2015 were analyzed to determine service utilization and projected expenditures. Service definitions were also compared to determine trends.

Methods



Medicaid Home and Community Based Service (HCBS) 1915(c) waiver applications were collected from the Centers for Medicare and Medicaid (CMS) Medicaid.gov website over a 1-year period (June 2015 to April 2016); see Figure for detailed tree of methodology. We utilized waivers to analyze OT service expenditures and utilization. We used descriptive statistics to determine OT service allotment across waivers and states, including total projected spending, projected spending per participant, reimbursement rates, and annual service provisions per participant. Service definitions were gathered from each waiver. OT service definitions were then qualitatively analyzed by one of the researchers using content analysis (Patton, 2002) to determine trends across FY 2015 services. (It should be noted that four services were excluded from the analysis of service expenditures because OT was provided within another service, such as 'physical health' or 'specialized consultative services.' Thus, it could not be determined how much spending was allocated for OT in these services.)

Service Definitions

Forty-three waivers (38.7%) from 21 states and the District of Columbia provided 63 OT services in FY 2015. The general description of OT services was: "the application of occupation-oriented or goal-oriented activity to achieve optimum functioning, to prevent dysfunction, and to promote health. The term occupational as used in occupational therapy refers to any activity engaged in for evaluation, specifying, and treating problems interfering with functional performances. Services include assisting in the evaluation of an individual to determine level of functioning by applying diagnostic and prognostic tasks and guiding and treating individuals in the prescribed therapy to secure and/or obtain necessary functioning. Provision of this service will prevent institutional placement."

The majority of waivers described the ways in which waiver services were different from the OT services provided in their Medicaid state plans (n = 52). States typically provided OT services in their waivers to provide:

- Long term care, rather than the immediate care provided in state plans (n = 31)
- In alternative settings such as in the community or in the participant's home (n = 29 waivers).
  - For example, Washington's Children's Intensive In-Home Behavioral Support Waiver detailed, "An example of the need for OT as a waiver service would be to allow the therapy to be provided in the family home. State plan services are provided in clinical settings and few providers are willing to come into the home to provide service. Children on the CIIBS waiver often require or benefit more from therapy provided in the home with the inclusion of family members due to high anxiety and challenging behavior that prevents them from accessing the clinical setting. In-home services offer the additional benefits of the natural environment which allows therapy to be incorporated into regular child and family routines."
- Services that were otherwise not covered by state plans (n = 11).
- When state plan OT coverage was exhausted (n = 9).
- Services to adults over 21 years old because state plan only covered those under 21 (n = 3).

A number of states also utilized waiver OT services to train direct care staff and caregivers to best support the participant with IDD in addition to providing services to the participant with IDD (n = 25).

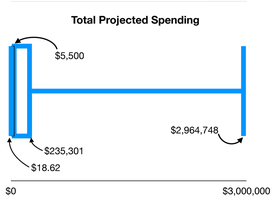
- For example, Kentucky's Supports for Community Living waiver notes, "These services address the occupational therapy needs of the participant that result from his or her developmental disability as well as development of a home treatment/support plan with training and technical assistance provided on-site to improve the ability of paid and unpaid caregivers to carry out therapeutic interventions.

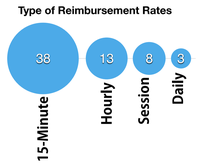
Service Expenditures

In FY 2015, a total of $14.13 million was projected for OT services for approximately 7,500 participants.

While the average waiver projected spending $227,968 (median = $39,453), total projected spending varied widely across services, ranging from $18.62 for Indiana Family Supports waiver's 'OT' service (1 participant) to $2,964,748 for New Mexico Developmental Disabilities Waiver Program waiver's 'OT, Standard (New)' service (1,231 participants). The average spending per capita was $0.18. Table 1 details projected spending and spending per capita by state.

An average of $1,558 was projected per participant for OT services in FY 2015. The median was $1,344. Projected spending per participant ranged from $18.62 to $5,107.





Reimbursement Rates

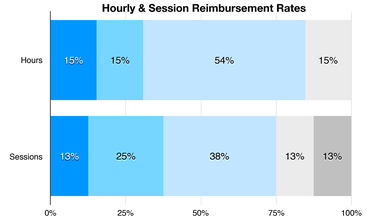
OT services were reimbursed by a number of different rates, including: 15-minutes; hourly; daily; and, session (i.e., each visit, session, procedure).

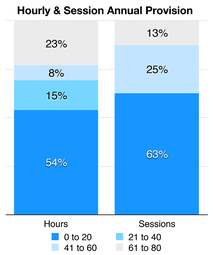
While the average 15-minute reimbursement rate was $18.29 and median $18.13, it ranged from $9.54 per 15 minutes to $30.68 per 15 minutes.

Of those services reimbursed by hourly rate, the hourly rate ranged from $15.61 to $85.75 an hour. The average hourly rate was $59.52 and the median was $71.95. . Of hourly rate services, 2 reimbursed at a rate between $0 and $25, 2 between $26 and $50, 7 between $51 and $75, and 2 between $76 and $100.

Those services that reimbursed by session, the average rate was $104.88 per session, median $73.41, ranging from $15.96 a session to $453.48 a session. Of session rate services, 1 reimbursed at a rate between $0 and $25, 2 between $26 and $50, 3 between $51 and $75, 1 between $76 and $100, and 1 over $101.

Three services were provided by daily rate, averaging $307.47 a day with a median of $312.00. Tennessee Self-Determination Waiver Program's waiver's 'OT: Assessment and Plan Development' service reimbursed at $292.32 a day, Tennessee Comprehensive Aggregate Cap Waiver's 'OT: Assessment and Plan Development' service $312.00 a day, and Tennessee Statewide Waiver's 'OT: Assessment and Plan Development' service $318.10 a day.





Annual Service Provision

The amount of OT services participants received in a year also ranged depending on the services and reimbursement types. Fifteen-minute rate services provided an average of 101.51 15-minute blocks of OT services per year to each participant (median = 97.95), ranging from one 15-minute block to 304 15-minute blocks.

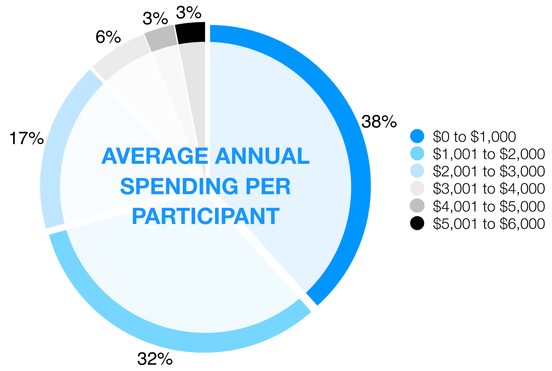
Hourly rate services provided on average 25.78 hours of OT services per year (median = 18), ranging from 1 hour a year to 70 hours a year. Of hourly rate services, 5 provided the average participant between zero and 10 hours of OT a year, 2 between 11 and 20, 1 between 21 and 30, 1 between 31 and 40, 1 between 51 and 60, and 3 between 61 and 70.

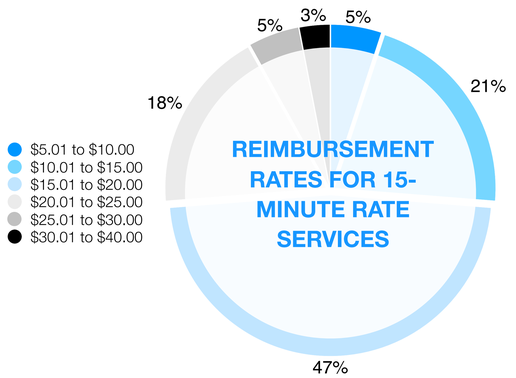
On average participants receiving services provided by session were projected to receive 26 sessions of services a year (median = 13.50), ranging from 1 session to 70 sessions. Of session rate services, 3 provided the average participant between 0 and 10 sessions a year, 2 between 11 and 20 sessions, 2 between 41 and 50 sessions, and 1 between 61 and 70 sessions.

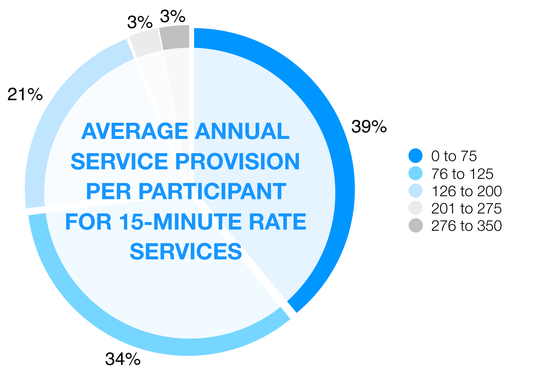
Finally, all three daily rate services – 'OT: Assessment and Plan Development' – provided 1 day of OT services a year.

Occupational Therapy Services For People with IDD in Medicaid HCBS Waivers (FY 2015) by State

State	Number of waivers providing	Total projected spending	Spending per capita
Alabama	2	$121,679	$0.03
District of Columbia	1	$18,525	$0.03
Florida	1	$2,683,899	$0.13
Georgia	2	$72,659	$0.01
Illinois	1	$177,600	$0.01
Indiana	2	$3,689	$0.001
Kentucky	2	$1,610,394	$0.36
Louisiana	1	$3,456	$0.001
Maine	1	$2,290	$0.002
Massachusetts	4	$368,280	$0.05
Mississippi	1	$15,690	$0.01
Missouri	3	$216,703	$0.04
Montana	2	$2,037	$0.002
New Mexico	1	$4,368,463	$2.10
Oklahoma	3	$733,920	$0.19
Oregon	1	$66	$0.00002
Pennsylvania	2	$177,826	$0.01
Tennessee	3	$2,148,072	$0.33
Texas	4	$517,416	$0.02
Washington	4	$41,393	$0.01
West Virginia	1	$694,249	$0.38
Wyoming	2	$178,077	$0.30







Discussion

An Alternative to State Plan Coverage

- Analysis revealed states utilized HCBS waivers to provide OT services in different ways from their Medicaid state plans.
- Included OT in waivers to provide continuous long-term care and improve participants' abilities to complete ADLs, rather than the short-term immediate care provided by state plans.
- Also used to extend exhausted state plan services and to provide OT services outside of traditional clinical settings, such as in the community and participants' homes.

Wide Variation in Allocation Across States and Services

- In FY 2015, $14.13 million of spending was projected for OT services, which is less than .1% of FY 2015 spending.
- HCBS waivers provided less than 1.2% of its 630,000 recipients with OT services in FY 2015.
- Findings also revealed large variability across states and services in terms of OT service provision. In addition to total projected spending, projected spending per participant, service provisions per participants per year, and reimbursement rates all ranged significantly across waivers.
  - For example, spending per participant ranged from $18.62 to $5,107.

Future Research: Factors Influencing Service Provision

Our findings of wide variance across states and services suggests many fruitful avenues for future study. For example, what factors influenced the decisions to limit service provision? How had local or national OT associations worked to influence those states that provide the highest rates and service provision? Are states including OT professionals in the development and implementation of processes for referral, assessment, and interventions? Waiver decisions impact clients' ability to access services vital to achieving and maintaining full participation in society. With state fiscal challenges, future research should also evaluate OT maintenance care waiver services because of their impact on reducing acute hospitalization, preventing and reducing the onset of secondary conditions, and lessening the incidence of costly institutionalized care.

Future Research: Effectiveness of Waiver Services

Occupational therapists working with clients on IDD waivers report reimbursement rates less than half usual fees, and systemic procedural complexities that significantly delay reimbursement (D. Davidson, personal conversation, August, 13, 2016). Research is needed to identify barriers and supports occupational therapists experiences with waivers to streamline this process. For example, how do the therapists working with limited service time target their interventions? Most importantly, how and in what way do OT services impact the lives of people with IDD in achieving the goals of the waiver – successful living in the community? Comparisons across states begin to examine these questions, which can strengthen the profession's ability to assert the value of its services.

Implications

It is critical for the profession to be able to document how OT services contribute to lower long-term care spending and improved client and caregiver outcomes (Grabowski, 2006). In order to describe the profession's overall value in healthcare provision OT must focus outcome research on OT's role in increasing efficiency within the system of care as we reduce overall costs (Lamb & Mezler, 2014). It is imperative that the profession continues research that contributes to the value-base of the services provided to support advocacy for a viable continuance of community services for individuals with IDD. OT research indicates LTSS positively influence the lives of people with IDD (Siporin & Lysack, 2004). However, the profession must also provide evidence of OT's role in reducing healthcare costs despite initial upstream increases in payment, as this research may influence policy decisions to exclude or reduce OT services (Grabowski, 2006). We believe the findings of this study can be used to help identify 'best practices' and advocate for the development/refinement of state OT programs.

The HCBS 1915(c) waiver program and the profession of OT share common goals for the clients they serve – preventing and overcoming obstacles to living and participating in community through increasing services and supports (Collins, & Strzelecki, 2006). Despite the needs of individuals with IDD, only 39% of state waivers provided OT services in FY 2015. The OT profession needs to translate the value of OT services to waivers by demonstrating inclusion of OT improves outcomes and reduces costs. Doing so requires simultaneously advocating for the profession and clients so they may optimize community participation.

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