HMA

HEALTH MANAGEMENT ASSOCIATES

Review of States' Approaches to Establishing Wage Assumptions for Direct Support Professionals When Setting I/DD Provider Rates

PREPARED FOR

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Research and Consulting in the Fields of Health and Human Services Policy, Health Economics and Finance, Program Evaluation, Data Analysis, and Health System Restructuring

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Introduction

More than 1,350,000 individuals with intellectual and developmental disabilities (I/DD) such as Down syndrome, cerebral palsy, and autism across the United States received long-terms services and supports (LTSS) through state I/DD agencies in fiscal year 2018.[1] Supports include residential services delivered in group homes, host homes, family homes, and independent living arrangements; center- and community-based training services; employment supports; and respite for family caregivers. State I/DD agencies contract with private nonprofit and for-profit agencies to deliver most LTSS.

States employ a variety of approaches for paying their contracted service providers. For example, a state may negotiate payment rates with individual service providers or may cost settle with providers based on submitted cost reports. The majority of states, however, have established fixed fee schedules wherein the state defines the rate for a given service that any provider wishing to deliver that service must accept.

States have substantial discretion in setting their rates. Most states with fixed fee schedules have developed rate models that detail assumptions related to various categories of provider expenses made to develop the total rate. The wages and benefits paid to direct support professionals (DSPs) – the staff who provide direct care – comprise the largest component of these rate models. Given the significance of DSP compensation in the determination of overall rates as well as the importance of the work performed by DSPs, the American Network of Community Options and Resources (ANCOR, at ancor.org) contracted with the Burns & Associates division of Health Management Associates (HMA-Burns) to summarize the approaches use to estimate DSP wages and benefits.

For 50 years, ANCOR has been a leading advocate for the critical role service providers play in enriching the lives of people with I/DD. As a national nonprofit trade association, ANCOR represents nearly 2,000 organizations employing more than a half-million DSPs. ANCOR's mission is to advance the ability of its members to support people with I/DD to fully participate in their communities.

Established in 1985, HMA is a leading independent, national research and consulting firm providing technical and analytical services related to publicly funded healthcare in the United States. Since its inception, HMA's has focused on providing meaningful help grounded in real-world experience to policymakers, providers, health plans, foundations, community-based organizations, and communities that serve populations that depend on publicly funded services.

HMA acquired Burns & Associates, Inc., a data analytics and health policy consulting firm in September 2020. HMA-Burns' practice includes a particular emphasis on supporting state I/DD agencies and, over the past decade, HMA-Burns has completed more than a dozen studies of state payment rates for services delivered to individuals with I/DD.

This review sought to answer the following questions:

- What data source was used to establish DSP wage assumptions?

- Recognizing that wage data from the United States Department of Labor's Bureau of Labor Statistics (BLS) is a common data source, which job classifications and wage benchmarks are used to estimate DSP wages?

- ▪ To what extent do states inflate wage data in order to bring the data current and, if they inflate wages, what benchmark is used?

- ▪ What benefit rate for DSPs is incorporated in the rate models?

Importantly, this evaluation does not seek to assess the adequacy of DSP wage assumptions or to critique state's methods for establishing these assumptions. Direct support is important and challenging work and DSPs deserve compensation that reflects the value of this work. However, the question of what constitutes appropriate compensation is outside of the scope of this review.

The remainder of this report details the results of this evaluation.

Approach

Based on its knowledge of I/DD rate studies conducted across the country supplemented by internet research and input from ANCOR and its members, HMA-Burns sought to identify rate models in as many states as possible. The resulting inventory includes the District of Columbia and 25 states as illustrated by Figure 1.

Figure 1: Map of Jurisdictions Included in this Review
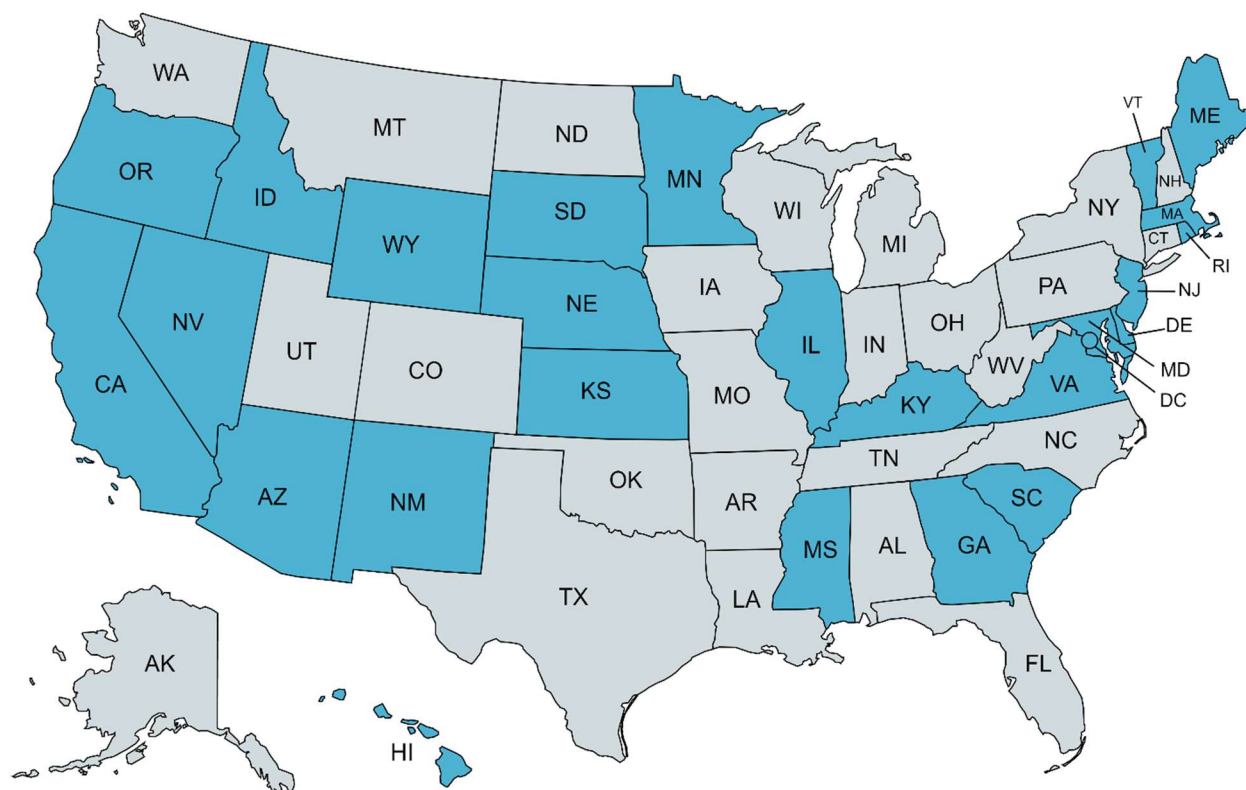
In addition to covering a variety of geographic regions, the states identified in this review are diverse in terms of size, demographics, economies, and political leanings.

In several of these states, multiple rates studies have been conducted. For the purposes of this evaluation, the most recent study was considered. The identified studies were completed between 2011 and 2022 with 18 of the 26 studies completed since 2019. This list does not encompass all states with a fixed fee schedule. A number of states have fixed fee schedules, but do not have rate models that detail the bases for their rates (or, at least, HMA-Burns was unable to locate such models). Additionally, states that have established minimum standards or requirements for DSP wages, but that have not established specific assumptions regarding an overall average DSP wage are not included in this review.

States usually seek assistance from an external consultant in the development of these rate models. Of the 26 rate studies reviewed, three were completed without apparent external assistance. The remaining 23 studies were completed by seven consulting firms:

- Burns & Associates: 10 studies

- Navigant/ Guidehouse: 5 studies

- Johnston, Villegas-Grubbs and Associates: 3 studies

- Myers & Stauffer: 2 studies

- Milliman: 1 study

- Optumas: 1 study

- Public Consulting Group: 1 study

HMA-Burns reviewed the rate models for each of the 26 jurisdictions and documented key aspects of the compensation assumptions. Wage assumptions often vary based on service, the assessed needs of the individual receiving services, and/or the region in which services are provided. To allow for comparability across states, HMA-Burns focused on the standard wage assumptions for three key services provided by DSPs: in-home personal care and habilitation, group home, and day program services. Not every study included a rate model for each of these three services.

Results

As detailed below, states' generally employ similar approaches to building fee-for-services rates, but there are meaningful differences in the data sources used, how data is adjusted to account for inflation, and the specific assumptions made.

Since the actual DSP wage assumptions incorporated in rate models are influenced by factors other than the data sources selected as benchmarks, such as when the model was established and state-specific economic factors, wage levels are not the focus of this evaluation. However, the following observations are noted:

- ***Significant variability in assumed DSP wages.*** Observed DSP wage assumptions ranged from a low of around $10.50 per hour to a high of nearly $19.00 per hour.

- ***Assumptions increasing over time.*** As would be expected, DSP wage assumptions tend to be higher in more recent studies; every study since 2018 included an assumption of at least $13.60 per hour.

■ ***Consistency across services.*** A majority of states establish a single DPS wage assumption regardless of setting. When wage assumptions do vary, the differences are often modest (usually within $1) with day programs tending to have the highest assumed wages and group homes the lowest.

Data Source for Wage Assumptions

Most rate studies include the collection of current DSP wage levels from providers. However, recognizing that providers' costs generally – and DSP compensation particularly since it represents providers' single largest expense – are a function of current payment rates, rate models usually rely on external wage benchmarks. Only two states used provider survey results to establish DSP wage assumptions. Amongst the remaining 24 jursidictions, the following data sources and approaches were employed (note that the count sums to 25 because one state used the Bureau of Labor Statistics for some services and the state's judgement for others):

■ Bureau of Labor Statistics: 20 states

■ Benchmarked against minimum wage: 3 states

■ State's determination (i.e., the state dictated the wage assumption to be used): 2 states

As the list demonstrates, the large majority of states relied on data from the BLS to establish DSP wage assumptions. According to the BLS, it is the ""only comprehensive source of regularly produced occupational employment and wage rate information for the U.S. economy, as well as States, the District of Columbia, Guam, Puerto Rico, the U.S. Virgin Island, and all metropolitan and nonmetropolitan areas in each State."[2] The report that accompanied California's rate study offered several reasons for the use of BLS data[3]:

> ***The large majority of states used data from the Bureau of Labor Statistics to establish DSP wage assumptions***

■ ***It is comprehensive.*** BLS wage data is representative of 1.2 million establishments and about 57 percent of the employment in the United States.

■ ***It is regularly produced.*** BLS wage data is published on an annual basis, allowing rate model assumptions to be regularly reviewed and updated.

■ ***It is cross-industry.*** BLS wage data is not limited to a single industry so estimates for a given occupation are representative of the overall labor market for that occupation; this is particularly important when considering wage levels for traditionally underfunded programs such as Medicaid.

■ ***It is state- (and local-) specific.*** BLS wage data is reported for individual states and substate areas, permitting the evaluation of wage variance across states and within a given state.

In two states and the District of Columbia, the DSP wage assumption was tied to the jurisdiction's minimum wage by adding a specified premium (for example, 150 percent of the minimum wage). Each

jurisdiction utilizing this approach has a minimum wage that substantially exceeds the current federal minimum wage of $7.25 per hour. As a result, this approach tends to produce higher wage assumptions.

Two states dictated a specific wage assumption to their consultant without an apparent data source. For example, one of these states determined that a $15.00 per hour DSP wage assumption would be used.

Bureau of Labor Statistics Benchmarks

States using BLS data must make two key decisions: they must determine which BLS occupational classifications to serve as a proxy for direct support professionals and they must decide which wage level to use.

The BLS does not have a standalone classification for DSPs. As a result, states generally exercise more discretion in choosing which classification or classifications to use as the basis for DSP wage assumptions compared to, for example, rates for nursing services since the BLS has specific classifications for registered nurses and licensed practical nurses. Rate models that use a single classification to benchmark DSP wages most often use home health and personal care aides (standard occupational classification 31-1120[4]). Although this is the occupation to which the BLS assigns most DSPs, some DSPs may be classified to another occupation. Additionally, this classification also includes workers in a variety of other fields, including home health, nursing facilities, and programs serving the elderly and people with physical disabilities. Considering rate models for in-home services (the service for which this study identified the largest number of rate models), five of 19 models benchmarked DSP wages to the home health and personal care occupation alone. Three states benchmarked DSP wage assumptions to the social and human service assistants occupation (21-1093), although national industry-level data for I/DD services shows that few workers are classified in this occupation.

Recognizing the imperfect fit of any single BLS classification for DSPs, the majority of rate models create a weighted average of multiple classifications to establish DSP wage assumptions. Figure 2 provides an example.

Figure 2: Illustration of DSP Wage Assumption Using Weighted BLS Occupations

Service	BLS Wage	Weight	Wage Value
Home Health and Personal Care Aide	$12.96	60%	$7.78
Psychiatric Aide	$21.46	25%	$5.37
Recreation Worker	$14.60	15%	$2.19
Total		**100%**	**$15.33**

States use weighted averages of BLS occupations when establishing DSP wages for two primary reasons. First, the use of multiple BLS occupations allows states to reflect the varied responsibilities of DSPs. In the example above, the composition of BLS occupations demonstrates that DSPs have responsibilities including attending to individuals' personal care and health care needs, managing individuals' behavioral needs, and helping individuals to access their communities. Second, the use of multiple BLS occupations allows states to establish higher DSP wage assumptions. As discussed above, states that use a single occupation as a benchmark for DSP generally use the home health and personal care aide classification since this is how the BLS classifies most DSPs. However, the reported wages for this occupation tend to be

low. In the example above, the reported wage for home health and personal care aides is $12.96 per hour whereas the weighted average produces a wage of $15.33 per hour.

Figure 3 reports the classifications used in the development of wage assumptions for DSPs providing in-home services in the 19 identified rate models that use BLS data.

Figure 3: List of BLS Occupational Classifications Used for DSPs Providing In-Home Services

BLS Standard Occupational Classification (Current)	BLS Description	Number of States
Home Health and Personal Care Aides (31-1120)	[Description for personal care aides] Provide personalized assistance to individuals with disabilities or illness who require help with personal care and activities of daily living support (e.g., feeding, bathing, dressing, grooming, toileting, and ambulation). May also provide help with tasks such as preparing meals, doing light housekeeping, and doing laundry. Work is performed in various settings depending on the needs of the care recipient and may include locations such as their home, place of work, out in the community, or at a daytime nonresidential facility.	15
Social and Human Service Assistants (21-1093)	Assist other social and human service providers in providing client services in a wide variety of fields, such as psychology, rehabilitation, or social work, including support for families. May assist clients in identifying and obtaining available benefits and social and community services. May assist social workers with developing, organizing, and conducting programs to prevent and resolve problems relevant to substance abuse, human relationships, rehabilitation, or dependent care.	10
Recreation Workers (39-9032)	Conduct recreation activities with groups in public, private, or volunteer agencies or recreation facilities. Organize and promote activities, such as arts and crafts, sports, games, music, dramatics, social recreation, camping, and hobbies, taking into account the needs and interests of individual members.	8
Rehabilitation Counselors (21-1015)	Counsel individuals to maximize the independence and employability of persons coping with personal, social, and vocational difficulties that result from birth defects, illness, disease, accidents, aging, or the stress of daily life. Coordinate activities for residents of care and treatment facilities. Assess client needs and design and implement rehabilitation programs that may include personal and vocational counseling, training, and job placement.	4
Psychiatric Aides (31-1133)	Assist mentally impaired or emotionally disturbed patients, working under direction of nursing and medical staff. May assist with daily living activities, lead patients in educational and recreational activities, or accompany patients to and from examinations and treatments. May restrain violent patients.	3

Figure 3: List of BLS Occupational Classifications Used for DSPs Providing In-Home Services

BLS Standard Occupational Classification (Current)	BLS Description	Number of States
Psychiatric Technicians (29-2053)	Care for individuals with mental or emotional conditions or disabilities, following the instructions of physicians or other health practitioners. Monitor patients' physical and emotional well-being and report to medical staff. May participate in rehabilitation and treatment programs, help with personal hygiene, and administer oral or injectable medications.	2
Medical Assistants (31-9092)	Perform administrative and certain clinical duties under the direction of a physician. Administrative duties may include scheduling appointments, maintaining medical records, billing, and coding information for insurance purposes. Clinical duties may include taking and recording vital signs and medical histories, preparing patients for examination, drawing blood, and administering medications as directed by physician.	1
Residential Advisors (39-9041)	Coordinate activities in resident facilities in secondary school and college dormitories, group homes, or similar establishments. Order supplies and determine need for maintenance, repairs, and furnishings. May maintain household records and assign rooms. May assist residents with problem solving or refer them to counseling resources.	1
Passenger Vehicle Drivers (53-3058)	This occupation includes the 2018 SOC occupations 53-3051 Bus Drivers, School; 53-3053 Shuttle Drivers and Chauffeurs; and 53-3054 Taxi Drivers.	1
Physical Therapist Aide (31-2022)	Under close supervision of a physical therapist or physical therapy assistant, perform only delegated, selected, or routine tasks in specific situations. These duties include preparing the patient and the treatment area.	1
Community and Social Svc. Specialist, All Other (21-1099)	All community and social service specialists not listed separately.	1
Healthcare Support Worker, All Other (31-9099)	All healthcare support workers not listed separately.	1

As the table demonstrates, states emphasize the use home health and personal care aide classification in their development of DSP wage assumptions since DSPs are most often categorized in this occupation. The in-home rate models of 15 of 19 states included this classification when establishing DSP wage assumptions. Further, when states use a composite of BLS occupations, this classification almost always receives the greatest weighting. In 14 of the 15 states that included the home health and personal care aide classification, this occupation comprised at least 50 percent of the total weighting.

> ***States using BLS data to set DSP wage assumptions generally use the home health and personal care occupation as the primary benchmark***

Other notable observations from this review included:

- ▪ ***Use of a small number of occupations.*** In addition to the use of the home health and personal care aide occupation, 10 states used the social and human service assistant occupation, and eight used the recreation worker classification. No other occupation was used by more than four states, and several occupations were used by only a single state.

- ▪ ***Differences in weighting of occupations.*** Even if states use a similar set of occupations, they may choose to weight the occupations differently. For example, for states that use the home health and personal care occupation in the calculation of the DSP wage assumption, the weighting varies from 20 percent to 100 percent. Weights assigned to the social and human service assistant occupation range from 15 percent to 100 percent. For all other occupations, weights are generally between 10 and 20 percent.

- ▪ ***Similarity across services.*** As noted above, some states establish different DSP wage assumptions based on setting (i.e., in-home, group home, and day program). Although the table above presents information for in-home services, the list of occupations used and the number of states using each are very similar for group homes and day programs.

The BLS publishes wage estimates for the country as a whole, for each individual state, and for regions termed metropolitan statistical areas (MSA), which are generally a collection of counties and which may cross state boundaries. Unsurprisingly, states that use BLS wage data usually use state-specific data. Of the 20 states using BLS data in determining DSP wage assumptions, 17 used state-specific data, two used national figures, and the remaining state used data for the highest-cost MSA in the state.

The BLS publishes a range of wage estimates for each occupational classification. Figure 4 illustrates the nationwide wage estimates for home health and personal care aides:

Figure 4: 2021 Nationwide BLS Wage Estimates for Home Health and Personal Care Aides

10th Percentile	25th Percentile	50th Percentile (Median)	75th Percentile	90th Percentile	Mean
$10.72	$11.58	$14.15	$14.53	$17.79	$14.07

As the table shows, the BLS publishes data at various percentile thresholds, which are the wages at which various proportions of the workers in the classification earn less than the reported amount. For example,

10 percent of home health and personal care aides earn $10.72 or less per hour, 25 percent earn $11.58 or less, etc. The median (50th percentile) is the wage at which half of the workers in the classification earn less and half earn more. In addition to these percentiles, the BLS also publishes mean values, which are the overall averages. The difference between medians and means can be illustrated by considering three workers each earning a different wage: $10.00, $11.00, and $15.00. The median wage in this example is $11.00 because that is the middle value (that is, half of the workers earn less and half earn more) whereas the mean wage is $12.00 (the sum of the three values divided by three).

The 20 states that use BLS wage data when setting DSP wage assumptions used the following wage values:

- Median wage: 14 states

- Mean wage: 4 states (including the state using wages for the highest cost MSA and one of the states using national figures)

- 75th percentile: 2 states (including the other state using national figures).

The list shows that a sizable majority of states use median wage values, generally based on the reasoning that this represents a fair assumption since it is the "middle" wage and is less influenced by outliers than mean wages. Since outliers are more likely at the high-end of the wage scale than the low-end (because wages cannot drop below the applicable minimum wage, but there are no wage ceilings), mean wages tend to be higher than median wages. There are exceptions, however, as Figure 4 shows that the nationwide median is greater than the nationwide mean. At the state level (including Washington DC), the mean wages for home health and personal care aides are higher than the median wages in 39 states. in 23 of these states, the mean wage is more than five percent greater than the median.

Wage Inflation Benchmarks

Whenever a state relies on an external benchmark for establishing DSP wage assumptions, past data is being used to develop future rates. BLS data is published every March, reflecting wage estimates for the previous May. Thus, a state using the most recent BLS dataset will be working with data that reflects a period between 10 and 22 months earlier. Similarly, provider survey data generally reflects a past accounting period. As a result, states often include some estimate of inflation to attempt to make the wage assumptions current.

Evaluating the 21 rate studies that use provider survey or BLS data to establish DSP wage assumptions (that is, excluding those states that established DSP wage assumptions without a specific data source or that directly tied DSP wage assumptions to the minimum wage), five states did not make any adjustment for future wage growth. The remaining 16 rate studies used a variety of measures to project wage growth:

- 3 states used the ***BLS' Consumer Price Index***, a broad measure of the change over time in prices paid for a "basket" of good and services. One of these three states used a component of the CPI specifically measuring changes in costs for medical care.

- 2 states applied a factor derived from ***observed changes in the BLS's reported average overall wage*** (across all occupations) within the state over time.

- 2 states used state-specific ***ten-year compound annual growth rate estimates for net earnings*** published by the Bureau of Economic Analysis (BEA).

- 1 state increased wage assumptions based on ***future changes to its minimum wage***. This approach sought to account for wage compression so the applied change is less than the actual increase in the minimum wage.

- 2 states applied the ***greater of the estimate produced by the BEA or the minimum wage adjustment*** described in the preceding bullet.

- 1 state used the ***BLS' Producer Price Index***, which measures the change over time in selling prices received by producers for their output. This rate study reported that it used a figure specifically related to residential homes for people with I/DD.

- 1 state used ***health care inflation estimates produced by IHS Markit***.

- 1 state inflated wages based on ***CMS Market Basket data***, which reports historic and forecasted changes in costs; the rate study did not specify which Market Basket was used.

- 1 state reported the use of a customized inflation factor.

- 2 states inflated wages, but did not report the source used to estimate inflation.

In general, these rate studies apply inflation to bring rates current to the point of implementation. An informal review of the adoption of these rates suggests that, if and when implementation occurs, further adjustments for wage inflation (or changes in other costs) are typically not applied. That is, once a fee schedule is implemented, the listed rates tend not to be revised on a regular schedule.

> ***Most states apply inflation to bring wages current, but do not regularly update assumptions after implementation.***

Benefit Rates

The benefits offered to DSPs are an important component of their total compensation, impacting their ability to continue working within the field, their job satisfaction, and their need to rely on public benefits such as Medicaid. A review of the benefit assumptions included in the rate study found the following:

- ***Substantial variability in benefit rates across states.*** Benefit rates expressed as a percentage of wages ranged from 24 percent to 49 percent. These differences are not explained by differences in wages (that is, lower benefit rates are not correlated with assumed wages).

- ***Similarity in the types of benefits included.*** Although not all states detail assumptions regarding how the benefit rate was calculated or even what benefits are included, those that do specify benefits typically incorporate similar benefits. These include mandatory payroll taxes such as Social Security and Medicare, state and federal unemployment insurance, and workers' compensation as well as more discretionary benefits such as health insurance, retirement, and other undefined benefits. Although states generally include paid time off (PTO) in their rate models, some states build the costs into the benefit rate while others build PTO hours into productivity assumptions.

- ▪ ***Differences in cost assumptions.*** Although similar benefits might be built into the rate models, the assumed costs vary significantly. For example, assumed health insurance costs range from $218 per employee per month to $601, driven by differences in assumed costs (such as whether the model seeks to fund employee-only plans or a mix of plan types), participation rates, and employee status (that is, some rate studies discount benefit costs for part-time workers). Retirement assumptions also vary significantly. A number of states do not include any specific assumption related to retirement while others assume contributions as high as almost 17 percent of wages.

Summary

Adequate payment rates are integral to ensuring a comprehensive provider network, a stable DSP workforce, and quality services for individuals with I/DD. Since DSP compensation accounts for providers' single-largest expense, the assumptions that states make regarding DSP wages and benefits when establishing their fee schedules drive overall payment rates.

A review of 26 states' approaches to establishing DSP wage and benefit assumptions, found the following:

- ▪ ***Substantial reliance on wage data from the Bureau of Labor Statistics.*** 20 of 26 states established DSP wage assumptions based on data published by the BLS. In general, rate studies used the median wages reported by the BLS within the applicable state.

- ▪ ***Without a specific BLS occupational classification for DSPs, states use a variety of proxy occupations.*** While DSPs are captured in the employer survey conducted by the BLS, they may be assigned to different occupational classifications and are always combined with other employees doing similar work across a variety of fields such as home health and nursing facilities. Most states use the classification that includes the largest number of DSPs – home health and personal care aides – when developing DSP wage assumptions, at least in part. However, most states create a composite of multiple BLS occupations to reflect the varied responsibilities of DSPs. Amongst the states that use such composites, the home health and personal care aide classification almost always receives the largest weight.

- ▪ ***Most rate studies incorporate wage inflation to trend wages forward.*** Recognizing that available wage data reflects the past, states generally inflate wages to the point at which the rates are expected to be implemented. However, very few states have mechanisms to continue to increase wage (or other cost) assumptions on an annual basis to account for ongoing inflation.

- ▪ ***Benefit rate assumptions vary across states.*** Assumptions related to DSP benefits differ significantly across states based primarily on differences related to health insurance and retirement cost assumptions.

The establishment of provider payment rates – and, therefore, DSP wage and benefit assumptions – is the responsibility of the states, so there will likely be no one-size-fits-all approach. However, this review helps illustrate the different approaches that state may consider when developing DSP wage and benefit assumptions that best reflect the needs of individuals, providers, and systems as a whole.

End Notes

[1] Larson, S.A., van der Salm, B., Pettingell, S., Sowers, M., & Anderson, L.L., (2021). *In-home and residential long-term supports and services for persons with intellectual or developmental disabilities: Status and trends through 2018*. Minneapolis: University of Minnesota, Research and Training Center on Community Living, Institute on Community Integration.

[2] Bureau of Labor Statistics. (n.d.). Frequently Asked Questions. Retrieved from https://www.bls.gov/oes/oes_ques.htm

[3] Burns & Associates, Inc. *DDS Vendor Rate Study and Rate Models.* March 15, 2019. Retrieved from https://www.burnshealthpolicy.com/wp-content/uploads/2019/03/DDS-Vendor-Rate-Study-Report.pdf.

[4] Since 2019, the BLS has combined wage values for home health aides and personal care aides. Prior to 2019, there were separate estimates for home health aides (SOC 31-1011) and personal care aides (39-9021).