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**Compensation Practices with in the Pennsylvania Intellectual  
Disability/autism Field 2022 Survey**

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**Abstract**

Pennsylvania (USA) providers of intellectual disability supports and services were surveyed regarding compensation and retention of Direct Support Professionals. Slightly over 100 (101) provider agencies, employing 21,172 Direct Support Professionals responded to the survey. Analysis revealed that the average hourly salary for Pennsylvania Direct Support Professionals was \$16.83. Turnover was calculated to be 37% per year, and at the time of the survey, 20% of all Direct Support Professional positions were vacant.

**Keywords:** DSP Compensation; workforce crisis; turnover; vacancy

**1. Introduction**

*1.1 Statement of Problem*

The challenge of recruiting and retaining a qualified Direct Support Professional workforce in community residential programs for people with intellectual disability predates the COVID-19 pandemic. In 2012, the President's Committee (President's Committee, 2012) labelled the situation a workforce crisis. Hewitt (2013) reasonably argued that the situation can hardly be called a crisis because it has been a challenging problem for so long. Perhaps it is more of a way of life. Further complicating the situation, it is noted that over the years, providers have added more services and added more staff to keep up with regulatory compliance. This has caused agencies to spread their staff thin. Whether the term "crisis" pertains, it is clear that provider agencies charged with providing support and services to individuals with intellectual disability are faced with significant challenges in their efforts to secure a qualified workforce.

The most frequently reported metric used to illustrate the workforce situation is Direct Support Professional turnover. In the published literature, turnover seems to be highly variable, perhaps a function of sample selection. Turnover seems to vary from as low as 25% per year (Spreat, McHale, & Walker, 2017) to over 50% per year (National Core Indicators, 2018). It must be recognized that even a "good" turnover rate of 25% can hardly be considered to be a good outcome. People with disabilities need consistency in their care, and this consistency is believed to be related to fewer incidents and better outcomes. To gain better contextual understanding of the figure, consider that only about 8% of accountant's turnover in a given year. The National Core Indicator project has conducted annual staff stability studies since 2014 (NCI, 2015 to

2021). These surveys, while variable in the number of respondents, employ relatively large, near national samples. As such, they offer a broad and reasonably valid perspective on the topic of Direct Support Professional turnover. A disturbing consistency emerges in this near national perspective; for seven consecutive years, turnover rates were in excess of 40%. The average annual turnover rate was 45.3%. No upward or downward trend was evident. It was disturbing values such as these that drove Henry Ford to make significant adjustments to the wages paid to his employees in 1914 in a successful effort to stabilize his workforce (Spreat, 2022a; Raff & Simms, 1987).

A slightly different perspective of Direct Support Professional turnover was present in data collected during the previous four Pennsylvania consortium surveys conducted by this research group. These surveys covered the years 2015 through 2019. Annual turnover rates was 30.2% per year, but this figure is somewhat misleading because the turnover rate was increasing over time. Despite this disturbing trend, it is noted that none of the Pennsylvania studies reach the turnover levels reported in the National Core Indicator project studies.

It has been argued that the percent of Direct Support Professional positions that are vacant (open) is a better index of the seriousness of the situation (Spreat, 2021b). While turnover is costly and affects program quality, vacancy is more of an existential challenge. At some point, the inability to fill positions will cause a program to fail. Repeated cross-sectional data collected by the National Core Indicator project suggest that Direct Support Professional vacancies are increasing over time, with a figure of 12.3% vacant positions reported in 2020. The comparable Pennsylvania figures offer a gloomier perspective, with vacancy rate exceeding 20% in 2018. Like the National Core Indicator data, the Pennsylvania data suggest a worsening of Direct Support Professional vacancies over time.

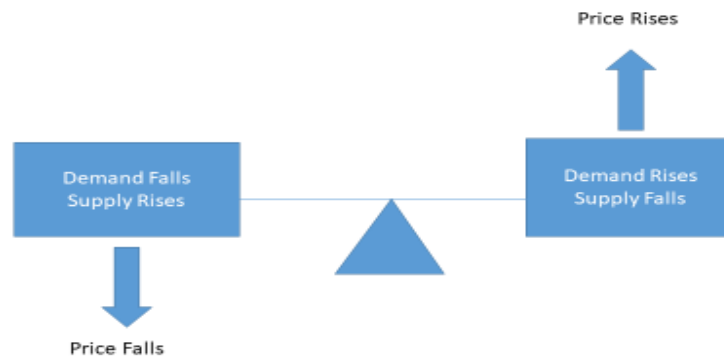
The challenge facing the intellectual disability profession is that it is unable to recruit and retain a sufficient number of qualified Direct Support Professionals. Multiple factors combine to create the increasing demand for Direct Support Professionals. People with intellectual disability are now living longer (Dolan, Lane, Hillis, & Delanty, 2019), and in turn, needing supports for longer periods of time. The number of people with intellectual disability now being supported in residential settings has increased from 259,909 in 1980 to 680,851 in 2015, an increase of approximately 162% (Lulinski, Jorwic, Tanis, & Braddock, 2018). The primary out of home residential service model, the three person group home (Conroy, 2017), is considerably more labor intensive than the earlier institutional model it replaced. In addition to these factors directly related to the intellectual disability field, it must be recognized that the Baby Boomer generation has reached the age at which supports, such as those provided by Direct Support Professionals, are increasingly in demand.

Spreat (2022b) has reported that both supply of and demand for Direct Support Professionals have climbed in a linear fashion, however, supply has never been able to catch up with demand. The supply and demand graphs over time reveal essentially parallel lines with about 10% variation; more Direct Support Professionals are being hired, but even more are needed. Bradley, MacBeth, Hewitt, & Galvez (2021) estimated that there are currently about 1.3 million Direct Support Professionals working within the intellectual disability field, and the vacancy rate data

presented above suggest that another 117,000 Full Time Equivalent (FTE) Direct Support Professionals are needed nationally. This continuing shortfall between supply and demand can be best estimated by examination of the number of vacant (open) Direct Support Professional positions. When reported in the professional literature, Direct Support Professional vacancy rate has tended to center around 9-10% of all positions. In 2000 Lulinski, Jorwic, Tanis, & Braddock, (2018). reported that 8.2% of all Direct Support Positions were vacant. An ANCOR (2001) survey the following year yielded a relatively similar 10.8% vacancy rate. More recently, the National Core Indicators project (2018) reported that approximately 11.2% of Direct Support Professional positions were vacant. This pattern centering around 9-10% held until 2018 when Spreat (2018) reported that 20.4% of Direct Support Professional positions in Pennsylvania were vacant. Spreat's (2019a) estimate was corroborated by the repetition of the survey one year later. A vacancy rate of 19.4% was obtained that year (Spreat, 2019a). These data, immediately preceding the pandemic, suggested a worsening of the Direct Support Professional vacancy problem, and they highlight the fact that the challenge of recruiting and retaining a qualified workforce is a long term problem (Hewitt, 2013) that appears to be worsening over time prior to the pandemic. Moreover, it is clear that while the demand for Direct Support Professionals has consistently increased, the supply of individuals willing to work in this position for the prevailing compensation package was unable to keep pace with the demand.

Larson, Lakin, & Bruininks (1998) studied the relationship of a variety of predictor variables and Direct Support Professional turnover. They reported that the largest predictor of turnover among Direct Support Professionals was hourly wage (i.e., poorer paying agencies experienced greater turnover). Given the relatively narrow range of salaries paid to Direct Support Professionals, this finding is noteworthy because in statistical analyses, a narrow range of scores within a given variable tends to minimize the utility of that variable in any prediction scheme.

The interactive concepts of supply and demand were introduced by John Locke (1691), and Adam Smith (1776) followed with a more detailed discussion of what he called the "invisible hand" that controls the economy. The core elements of the concept are that when demand for a product or service increases, steps need to be taken to re-establish an equilibrium between supply (in our case, supply of Direct Support Professionals) and demand (for Direct Support Professionals). Figure 1 below illustrates that when the demand for a product or service exceeds supply, the price of that service or product will increase. Price is generally the factor that functions to establish an equilibrium between supply and demand (Marshall, 1890; Pettenger, 2017). If the price for a product or service does not increase in response to a growing demand, shortages will entail. With regard to the Direct Support Professional workforce crisis, it would be reasonable to suggest that an increase in wages (i.e., price) will likely result in a collateral increase in the supply of people seeking employment as Direct Support Professionals. Economic theory suggests that better pay for Direct Support Professionals would significantly decrease the magnitude of the workforce crisis. The magnitude of the pay needed to achieve this equilibrium, however, would be an empirical question.



**Figure 1. Illustration of the relationship between supply, demand, & price.**

A number of provider associations and advocacy networks continue in their efforts to resolve or at least minimize the workforce crisis. Some (New Jersey Coalition for a Direct Support Professional Living Wage, undated) call for Direct Support Professionals to be paid a “living wage,” as defined by the MIT Living Wage calculator (MIT, undated). Blumenthal (2022) has argued that community based Direct Support Professionals should be paid the same as those who work in state developmental centers. Spreat (2021a) has argued for a more empirical approach in which wages would be increased until vacancies are eliminated. These approaches essentially ask the government for more money, rather than demanding to be part of the negotiation process regarding prices.

### *1.2 Impact of Controlled Prices*

It must be recognized that private provider agencies are in no way limited as to the amount they pay Direct Support Professionals. No governmental authority has mandated a specific hourly wage for Direct Support Professionals. Instead, various governmental authorities place limits on what they will pay the private providers for delivering supports and services to people with ID/A. This process of setting rates for services and supports effectively constrains the provider agencies from achieving an equilibrium between supply of and demand for Direct Support Professionals by adjusting the wages paid to these individuals. Arguably, the use of purchaser defined prices for supports and services is at least a maintaining factor to the workforce crisis.

A pattern of systematic underfunding of social services (Harvey & Tropman, 2010) has eliminated any flexibility provider agencies may have in establishing enhanced payment models for Direct Support Professionals. Walker (2016) testified to the Pennsylvania House Human Services Committee, reporting that while the Pennsylvania general budget grew an average of about 4.4% per year from 1995 to 2016, community ID/A spending increased less than 1% per year for that same time period. This is almost a 500% difference. Note that approximately 1/3 of

Pennsylvania intellectual disability providers have expenses that exceed revenue each year (Spreat, 2019b), and that agencies tend to have revenues that exceed expenses (operating margins) by between 1.0% and 1.5%. It has been suggested that a fiscally healthy non-profit will have an operating margin between 3% and 5% (Higher Education Funding Council for England, 2018; Harrison & Montalvo, 2002). Note that intellectual disability providers typically spend between 75% and 85% of their entire budgets on staffing costs. This leaves little room for budget adjustments to entice new staff or to compensate existing staff more fairly. It is clear that under current conditions, providers are unable to pay a wage sufficient to create an equilibrium between supply and demand for Direct Support Professionals.

Pettenger (2017) has suggested that constrained, or fixed, prices will ultimately lead to shortages. In the intellectual disability field, we observe both staffing shortages and program shortages in the form of substantial waiting lists for service. When the price of providing supports and services is artificially constrained, as when the government sets the rates it will pay for intellectual disability services (i.e., fixes the price), the marketplace is challenged to establish an equilibrium between supply and demand (Armentano, 1967; Rockoff, undated). Armentano (1967) noted that almost every piece of governmental price fixing legislation has produced results opposite of those intended. Within the intellectual disability field, staff shortages, waiting lists for services, and selection of program offerings based on rate paid rather than consumer need are all evident.

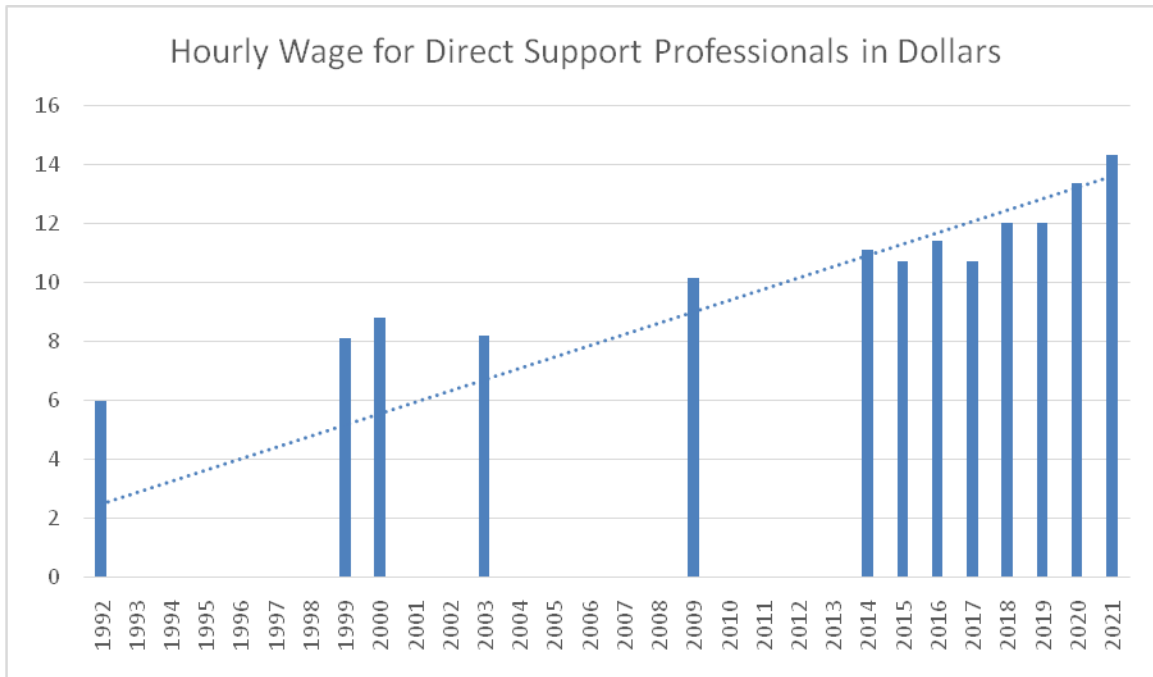
In a free market, the price of a service or product is supposed to be the result of some sort of negotiation between buyer and seller (Pettenger, 2017), but Pennsylvania providers are not actively involved in any sort of meaningful negotiation. It would seem that providers of social services (the sellers) have allowed purchasers (i.e., the government) to have complete control over prices. Even when these fixed prices do not fully cover the cost of providing services, providers typically accept partial payments, hoping to fund the services and products in some other manner. Arguably, this is the nature of an altruistic business. These other manners might include alternative fund raising, using funds from better paying purchasers to subsidize the poorer paying purchasers, and most notably, under compensating Direct Support Professionals to the point of creating a workforce crisis. One might argue that Direct Support Professionals are major fiscal supporters of the intellectual disability system.

### *1.3 So If It Is Mostly Money – What Does the Money Trail Look Like?*

Direct Support Professional salary surveys can be traced back to about 1992, when Braddock & Mitchell (1992) reported an average hourly salary of \$5.97 for people working in what we would now call Direct Support Professional roles. Surveys of this nature have been repeated over the years using both local and national samples. Note that these repeated surveys do not constitute a longitudinal study because the same sources were not polled each year. Despite this shortcoming, it is clear that Direct Support Professional salaries have increased over the years, roughly maintaining pace with inflation (US Inflation Calculator, undated). The \$5.97 per hour compensation rate reported by Braddock & Mitchell in 1992 would be equivalent to an hourly rate of \$12.61 in 2022 when adjusted for inflation. This latter finding, of course, means that an inadequate wage in 1992 will still be inadequate in 2022. The continuation of an inadequate

wage may be associated with the decreased selectivity in Direct Support Professional hiring practices noted by Davis, Spreat, & Gruber (2021).

Figure 2 presents the reported Direct Support Professional average hourly salary from a series of studies conducted and published over the past 30 years. To simplify presentation, when multiple surveys were reported in a single year, only the data from the largest of the surveys were reported. The graph reveals a linear trend in which wages do increase, but apparently remain inadequate to attract a sufficient workforce.



**Figure 2. Hourly Direct Support Professional Wage over Time – Multiple Sources**

A more parochial perspective can be derived from examination of just the wages reported in the consortium supported studies conducted in Pennsylvania over the past several years (Spreat, Brown-McHale, & Walker, 2017; Spreat, 2017; Spreat, 2018; Spreat, 2019; Consortium, 2022). Over the course of six years, the average hourly wage for Pennsylvania Direct Support Professionals increased from \$11.26 to \$14.83. It should be noted that the final data point in 2021 was collected in the midst of the COVID-19 pandemic, and these latter wage figures were impacted by one-time COVID relief funding. Clearly wages have increased over time, with these data suggesting about a 28% increase over seven years.

Additional perspective on Direct Support Professional compensation and provider fiscal condition can be gleaned from a longitudinal examination of the Pennsylvania general budget and Pennsylvania spending on intellectual disability services. Figure 3, from Walker's (2016) pre-pandemic testimony to the Pennsylvania Commonwealth Legislature, suggests the rate of spending for intellectual disability supports and services has not kept up with the rate of

spending in the Pennsylvania general budget. Harvey and Tropman's (2010) observations about systematic underfunding of social services seem at least somewhat supported by these data.

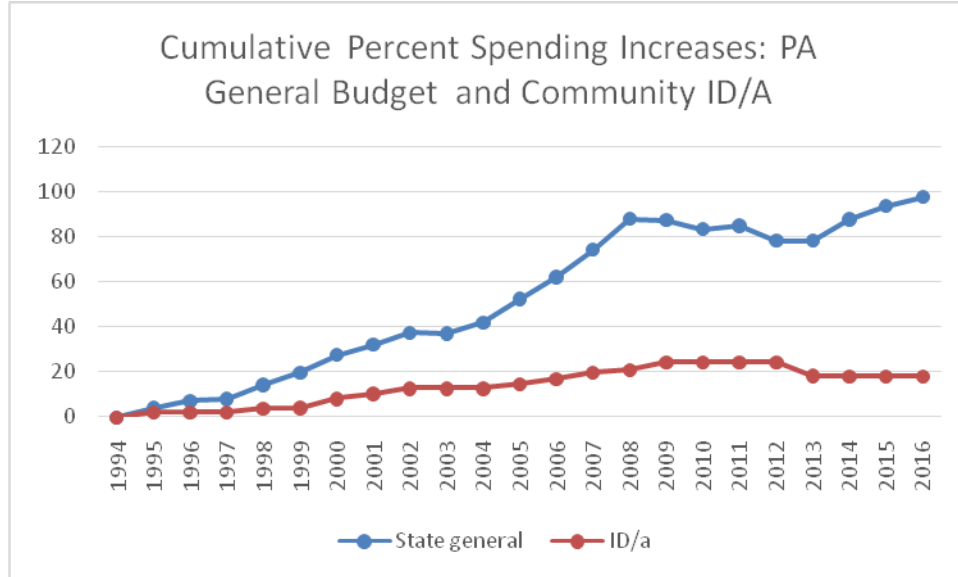


Figure 3. Cumulative spending increases

The purpose of this study was to collect data on compensation patterns for Pennsylvania (United States of America) Direct Support Professionals, along with data regarding turnover and vacancy rates.

**2. Methods**

2.1 Survey Participants - Pennsylvania provider associations (MAX, PAR, and The Alliance) solicited their membership to participate in this survey. Participation was entirely voluntary, and no one was compensated for their participation. Agencies were allotted two weeks to complete the task, with a two-week grace period added. Data reflect a September/October 2022 collection.

One hundred one (101) agencies elected to participate in the survey process. These 101 agencies ranged in size from an annual revenue of \$519,000 to an annual revenue of \$583,994,784. The median annual revenue was \$18,000,000. These responding agencies provided supports and services in all Pennsylvania regions, with many agencies providing supports and services in multiple regions.

2.2 Survey Instrument – The survey instrument was a refined version of the instrument used in four prior Pennsylvania surveys, having been initially developed by a consortium of providers in 2014. The refinement this year consisted largely of expanding the survey to include positions other than Direct Support Professionals and Front Line Supervisors. The current survey includes all staff with the exception of the senior executive staff. A consistent pattern of results when

compared with earlier Pennsylvania studies suggest some degree of reliability, however, it must be recognized that the reliability of the survey instrument lacks empirical verification.,

All data were collected via Survey Monkey, with analysis being completed using SPSS (Statistical Package for the Social Sciences) and Microsoft Excel.

### **3. Results**

Respondents reported that 21,172 Direct Support Professionals were employed within their agencies. There were 15,899 Full Time Direct Support Professionals and 3783 Part Time Direct Support Professionals. There were an additional 1490 Direct Support Professionals who were employed by 33 agencies as per diem Direct Support Professionals. It has been estimated by a number of Pennsylvania sources that there are approximately 55,000 Direct Support Professionals employed within the PA ID/A system (PA Connecting Communities, undated), suggesting that this survey has captured information on slightly more than 1/3 of the population of Pennsylvania Direct Support Professionals (38.5%).

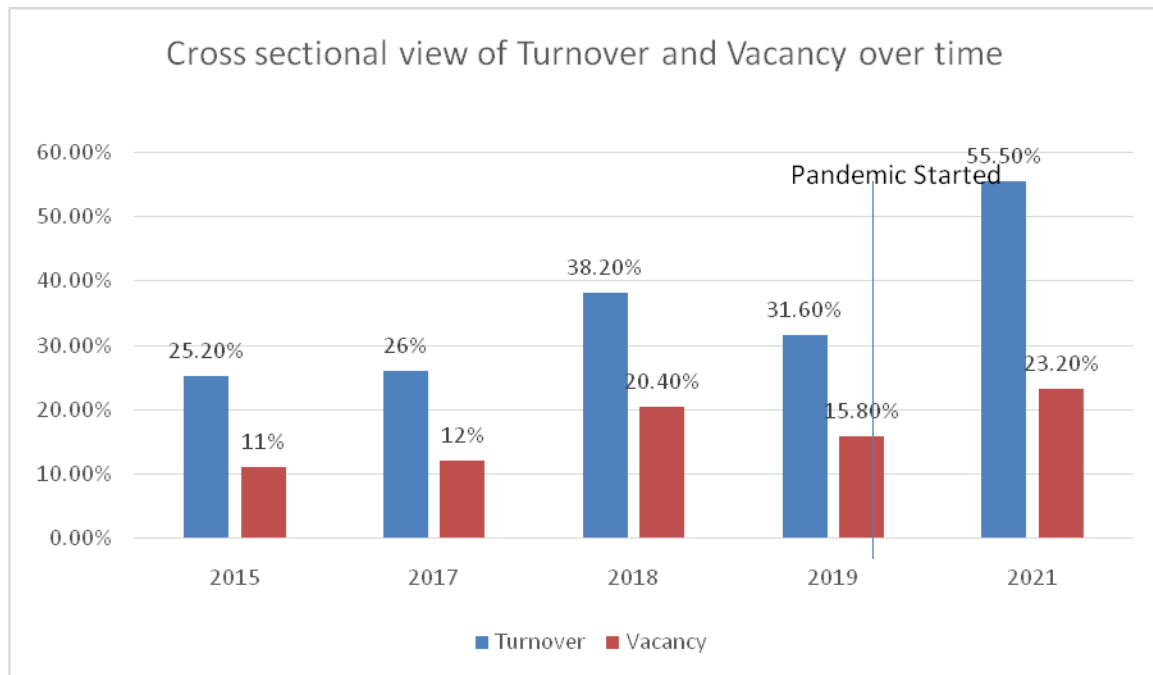
3.1 Hourly Wage – The average hourly wage paid to Full Time Direct Support Professionals was \$16.79, while part time Direct Support Professionals were paid \$16.99 per hour. Overall, the average hourly pay rate for Pennsylvania Direct Support Professionals in October 2022 was determined to be \$16.83, which is approximately 52% of a living wage for a single person with one child in the Philadelphia area. These average hourly wages ranged from \$12.06 to \$21.00.

3.2 Turnover/Vacancy–The 101 responding agencies reported that 5638 Full time Direct Support Professionals and 3783 Part Time Direct Support Professionals separated from their agency for any reason. These data suggest an overall Direct Support Professionals turnover rate in Pennsylvania of approximately 37%. Turnover rate for Full Time Direct Support Professionals would be approximately 34%, while turnover rate for Part Time Direct Support Professionals would be 44%.

Overall vacancy rate for Direct Support Professional positions was determined to be 20%, with a 19% vacancy rate for full time positions and a 44% vacancy rate for part time positions.

The figure below depicts the turnover and vacancy rates from the previous and current Pennsylvania Direct Support Professional compensation surveys.

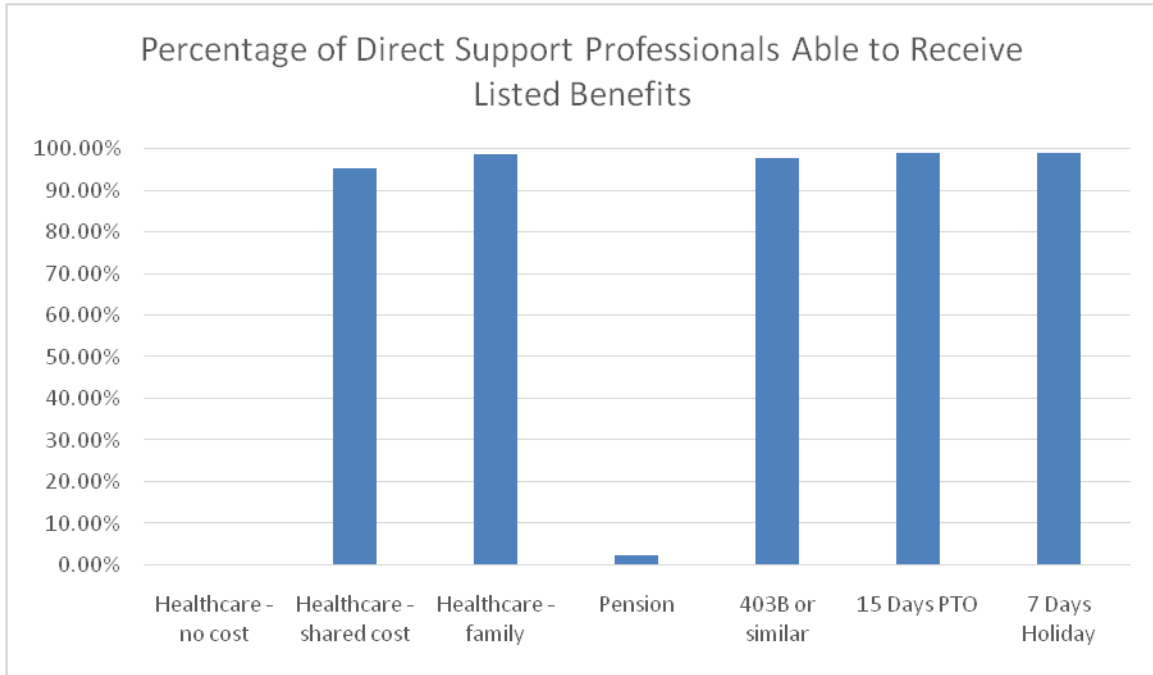




**Figure 4. Cross sectional view of turnover and vacancy rates over time**

The data presented in Figure 4 suggest that despite legislative efforts to provide increased supports in the pandemic era, providers have been unable to achieve manageable rates of turnover and minimal vacancies. Unacceptable rates of turnover and vacancy have been maintained. The increases noted immediate prior to the pandemic onset have been maintained. It should be recognized that 15% of agencies report having closed programs and 30% report having consolidated group homes (Spreat, Davis, & Gruber, 2021). These actions would reduce demand for Direct Support Professionals, and this reduction would seemingly impose some limitations on turnover.

3.3 Benefits Offered – Figure 5 presents the percentage of Direct Support Professionals who receive identified employment benefits. There is considerable consistency with regard to benefit packages, and it appears that Pennsylvania provider agencies offer benefit packages generally comparable with other private employers. It should be noted percentages regarding healthcare will not total to 100% because some agencies offer multiple insurance options.



**Figure 5. Percentage of Direct Support Professionals able to receive listed benefits.**

**4. Discussion**

It must be recognized that this is a single state study, and the generalization of these findings to other states remains an empirical question. Certainly, the results collected in this study are linked to the funding practices followed in Pennsylvania.

It is clear that the Pennsylvania legislatures has put forth efforts to approach a living wage for Direct Support Professionals, providing funding that enable a 49.5% increase in average hourly Direct Support Professional wage from 2015 to 2022. Unfortunately, our data suggest that despite appreciable wage increases for Direct Support Professionals, turnover and vacancy rates remain problematic. It must be recognized that over this same 7 year time period, the Direct Support Professional vacancy rate has increased 82% ( from 11% of all positions to 20% of all positions) and turnover has increased 44% over the same time period ( 25% per year to 36% per year). These changes occurred against the backdrop on a modest increase in the number of Pennsylvanians being supported in residential programs and the COVID-19 pandemic

Basic economic theory of supply and demand (Pettenger, 2017; Marshall, 1890) would suggest that price is the factor that creates an equilibrium between supply of a product and demand for that product. In the case of this workforce crisis, it is evident that the supply of individuals willing and able to work as Direct Support Professionals is insufficient to meet the demand for such workers. Despite wage increases for Direct Support Professionals (price increase), equilibrium has not been reached. That the increased wages did not result in decreased vacancy and turnover rates is not to suggest that wages are not a primary cause of the workforce crisis, but rather that the amount of raise given was insufficient to make a difference. As noted in the

MIT living wage calculator, a living wage for a single parent with one child in Philadelphia is \$32.41 per hour. These data suggest that the current average Direct Support Professional hourly wage of \$16.83 is roughly 52% of a living wage. The history of Ford Motor company (Raff & Simms, 1978) and the San Francisco trash collectors (Perry, 2017) suggest that an increase may need to be more substantial to have an impact.

The data presented regarding Direct Support wages, turnover, and vacancy rates place advocates in the awkward position of thanking the legislature for funds that enable a substantial increase to Direct Support Professional wages, and then turning around to ask for more money. Contemporary appeals for increased Direct Support Professional wages can take many forms (Living wage, same as state workers, etc.), it must be recognized that the "right" Direct Support Professional wage is that wage that essentially eliminates the workforce crisis. Given the long term history of underfunding of social services (Harvey & Tropman, 2010), it is perhaps wishful thinking to lobby state legislatures for higher funding levels that would enable better Direct Support Professional pay. Perhaps agencies need to consider options such as decreasing Direct Support Professional demand by broadening the use of adult foster care programs or increasing supply through targeted immigration (Clark, Taylor-Cook, Farry, Hansen-Turton, & Spreat, 2023). Passage of federal legislation to enable such immigration strategies, however, should not reduce efforts to obtain a dignified living wage that shows societal appreciation for the work of Direct Support Professionals.

Medicaid rules require that providers of intellectual disability services be paid at a market rate. Thus, must states routinely conduct market surveys of rental costs, utilities, employee costs, etc. Such surveys of an industry operating with a 20% vacancy rate would seem to be demonstrably invalid. It would seem that the true market rate for Direct Support Professionals would be the rate at which all Direct Support Professional positions were filled with qualified applicants.

The alternative to attempting to increase the supply of Direct Support Professionals is to find ways to reduce the demand for such employees. Perhaps the most reasonable way to reduce the demand for Direct Support Professionals is to increase Pennsylvania's Life Sharing program (perhaps called adult foster care in other states), and where safely possible, replacing overnight staff with electronic monitors and alarms.

In contrast with the wage, turnover, and vacancy data, the data on employee benefits are encouraging. The data suggest that almost all full time Direct Support Professionals in Pennsylvania receive healthcare insurance and almost all are able to participate in a retirement plan. Most of these plans 403B type plans, with reliance on defined benefit pension plans remaining at a relatively low level.

The workforce crisis continues unabated despite governmental efforts at remediation, and It seems evident that a multi-faceted, strategic approach is needed to address the ID/A workforce shortage. This approach may include: alternative payment models, enhancing staff's work-life balance, increasing operational efficiencies, reducing regulatory burdens that do not add value to the lives of people with disabilities nor assure a satisfactory level of accountability for the use of

public funds, leveraging technology-enabled supports and other strategies. As Nacer & McKee (2022) suggested, "multiple silver bullets" will be needed to resolve this crisis.

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