
The Intellectual Disability Workforce Crisis: Trends, Causes, & Remedies

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Abstract

The intellectual disability field is unable to hire and retain a sufficient number of qualified Direct Support Professionals. These are the individuals who provide care and training directly to individuals who have intellectual disability. The magnitude of this workforce crisis was examined through a series of seven Pennsylvania (USA) surveys collected between 2015 and 2024. Surveys revealed that Direct Support Professional wages increased at a rate that exceeded inflation, however, the wage increases appeared to have no appreciable impact on either turnover or vacancy rate. Possible causes and maintaining factors of the workforce crisis are hypothesized, along with possible remedies.

Keywords: Intellectual disability, workforce crisis, turnover, vacancy rate

1. Introduction

The intellectual disability field is unable to attract and retain a sufficient number of appropriately qualified Direct Support Professionals to provide needed supports and habilitation services to people with legitimate needs. There is a chronicity to this challenge, with Scheerenberger (1982) noting turnover rates of 200% in the 1920s. Contemporary reports suggest relatively stable turnover rates in the neighborhood of 40% per year (NCI, 2015-2023) and a recent increase in the vacancy rate. In 2017, The President's Commission for People with Intellectual Disabilities (2017) labelled the situation a crisis. A similar declaration by the American Association on Intellectual and Developmental Disabilities (2016) preceded the action of the President's commission. The use of the term "crisis" is probably incorrect, as Hewitt (2013), suggested that the long term nature of this situation is inconsistent with the definition of crisis. Regardless of the term applied to characterize the situation, it is clear that the demand for Direct Support Professionals exceeds the supply of these individuals.

The primary cause of this situation is the low pay that is received by Direct Support Professional (Spreat, 2021). Price (in this case, wages) is supposed to be the force that creates an equilibrium between supply and demand (Marshall, 1980; Pettenger, 2017). When the demand for a product or service exceeds the supply of that product or service, the price will increase, eventually resulting in an equilibrium between supply and demand. Let us start with a basic assumption. If compensation for a position is adequate, the supply of individuals willing to work in that position will be adequate. The fact that the intellectual disability field endures a 20% vacancy rate and

40-50% turnover merely highlights the insufficiency of compensation practices. This is the essence of supply and demand economic theory. If the demand for a product (in this case, Direct Support Professionals) exceeds the supply of that product, it is definitional that the price for that product is too low. Raising the price will result in an equilibrium between supply and demand. Considering the workforce crisis in the Intellectual Disability field, it is reasonable to speculate that a dramatic increase in compensation for Direct Support Professionals would completely eliminate the workforce crisis (Spreat, 2022a).

While it is reasonable to hypothesize that low wages are the primary cause of the workforce crisis, one must recognize that a number of other factors have come together to exacerbate the workforce crisis. No one is in a position to definitively state the causal relationships between any of these additional factors and the workforce crisis, however, each factor must be given serious considerations. Consider the following potential contributors.,

1. More People Living in Residential Settings - The State of the States project (undated) provides a ready reference for estimating the number of Americans with intellectual disability who are receiving residential supports and services. These data have been examined from 2009 through 2019, and across this time, the trend suggests an annual increase of 2-3%. Simply, more people are receiving residential supports and services than in prior years. More staff are needed to support these needs. Spreat (2022a) applied standard residential staffing formulae to the State of the States longitudinal data in order to estimate the changing demand for Direct Support Professionals. These data suggest that the demand for Direct Support Professionals increased by an average of 3.3% per year over this ten year period. Note also that demand for Direct Support Professionals actually decreased in large settings, but this decrease was offset by the continued modest growth in the more laborintensive community living arrangements. This increase in demand is illustrated in the figure below:
2. Community Group Homes are More Labor Intensive for Direct Support Professionals - The most common group home size is three residents, and this would seem to imply that for the typical group home, the bare minimum staffing during waking hours would be one staff – or a 1:3 staffing ratio. There are some creative staffing means with which to reduce the number of needed workers, but such staffing creativity does not appear to be an overwhelming force within the field. Many licensing regulations require only 1:8 staffing, but this is impossible in a three or four-person group home.
The community based group home became the dominant residential model for intellectual disability in the United States in 1991 (Conroy, 2017), and the growth of the model has continued over time. State of the States data (undated) suggest that as much as 85% of people with intellectual disability who receive residential supports receive them in small group homes. The point in this argument is that the residential model has evolved over time, and the contemporary model is considerably more labor intensive than earlier institutional models, thereby increasing the demand for Direct Support Professionals.
3. People with Intellectual Disability are Living Longer– Life expectancy tables produced in the 1950s suggested an average life span of 66 years for the typical American citizen. By 2007, this value had increased to 78 years of age (Heller, undated). This increased life span has been shared with persons who have intellectual disability (Patja, Iivanainen, Vesala,

Oksanen, & and Ruoppila, 2000}. The increased life expectancy seems to vary as a function of level of intellectual functioning (Bittles, Petterson, Sullivan, Hussain, Glasson, & Montgomery, 2002). They reported that the mortality rate for people with mild intellectual disability (the most common classification) was comparable with the general public, while life expectancy declined as the level of disability increased. Clearly, the increase in life expectancy is related to an increased demand for Direct Support Professionals.

4. Increasing Support Needs of the Baby Boomer Generation – The Baby Boomer generation has reached the collective age at which a significant number of them need increased supports and services. Some will need to rely on home health aides or nursing home aides to support their continued functioning. These home health aides and nursing home aides are drawn from the same pool of potential employees as are the Direct Support Professionals who work in the intellectual disability field. It is a similar job. An increased demand by the Boomers has an impact on the supply of Direct Support Professionals working with people who have intellectual disability.
5. The Problem of Controlled Prices – Economists generally recognize that controlled, or fixed prices lead to a common outcome – shortages (Pettenger, 2017). While no government agency places limits on what wages may be paid to Direct Support Professionals who work in private agencies, the governmental practice of controlling prices paid for the provision of supports and services effectively limits what any provider can afford to pay its staff. Theoretically, a private provider could pay whatever hourly wage was necessary to eliminate the workforce crisis. Practical realities, however, prevent this from happening. While McDonald's can raise the price of a Big Mac to generate sufficient revenue to pay staff, private provider agencies in the intellectual disability field have no control over their pricing structure. Prices are set by the purchaser of services – typically a government agency. 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 consequences of fixed government prices.
6. Competition among Employers – Better paying jobs are readily available, particularly in more densely populated areas. For example, starting wage for Amazon drivers in New Jersey is \$20.75 per hour.
7. Impact of Pandemic – The United States Bureau of Labor Statistics (Bureau of Labor Statistics, undated) reported that 47 million Americans left their jobs in 2021. This was an unprecedented mass exit, thought to be causally linked to the COVID-19 pandemic. DeChant (undated) noted that 18% of the healthcare workforce has resigned since 2020. Increased demands and increased risks were thought to be related to the resignations. Fuller and Kerr (2022) offer a contrary position, noting that the resignations in 2021 reflected the continuation of a trend that was evident as far back as 2009. Their data suggest that the mass resignations of 2021 was not so much short term turbulence in the labor market as the continuation of a trend. The impact of the pandemic on the workforce is not entirely clear. Whether the impact is transitory or permanent is not known. The extent to which the pandemic is causally related to the resignations is not known, although it is generally acknowledged as a factor.

It should be recognized that a confluence of many factors may contribute to the challenging workforce situation in the intellectual disability field. While economic theory strongly suggests that poor compensation is at the root of the problem, clearly, a number of other factors may exacerbate the problem. It is clear that the demand for Direct Support Professionals has continued to grow over the past 20 years and will probably continue, at least until the Baby Boomer generation dies. This increase in demand has been met with modest compensation increases, none of which appear to be sufficient to establish an equilibrium between supply and demand. The absence of an equilibrium is exacerbated by the ready availability of alternative employment (at higher wages), and the impact of the COVID-19 pandemic cannot be discounted.

2. Method

Like most of the United States, the Commonwealth of Pennsylvania has faced significant challenges in efforts to staff a workforce in the intellectual disability field. An evolving consortium of provider associations has collaborated to collect data regarding the intellectual disability workforce. These efforts began in 2015, with the most recent data collection occurring in 2024. The results of the surveys were released in a series of technical reports from the participating provider associations (Consortium, 2024, 2022, , 2019,2018, 2017,; Davis, Spreat, & Gruber, 2021; Spreat, Walker, & McHale-Brown, 2017) In each of the seven surveys, the membership of each of the participating provider associations was invited to participate in the study. Because individual volunteer participants varied from survey to survey, this project is more appropriately recognized as a cross-sectional endeavor, rather than a longitudinal study. Direct Support Professionals included in these surveys varied from 17,000 to slightly over 34,000. It is estimated that there are 55,000- Direct Support Professionals working in the Pennsylvania intellectual disability field. Key metrics for the Direct Support Professional position were hourly wage, Turnover rate, and vacancy rate. These seven surveys were evaluated for changes over time

3. Results

The figure below (figure 1) plots the weighted average hourly wage paid to Direct Support Professionals who work in Pennsylvania's intellectual disability system. The data suggest a gradual increase over time. Note that the increase from \$11.26 in 2015 to the current \$17.13 in 2024 represents a 52% increase, and this increase exceeds the rate of inflation (BLS Inflation calculator). While exceeding the rate of inflation is certainly positive. One must note that the current hourly wage of \$17.13 represents about 77% of a living wage in the Philadelphia (PA) area if one is single with no children. Add a child to the equation, and the average hourly wage falls to 43% of a living wage (MIT, 2015).

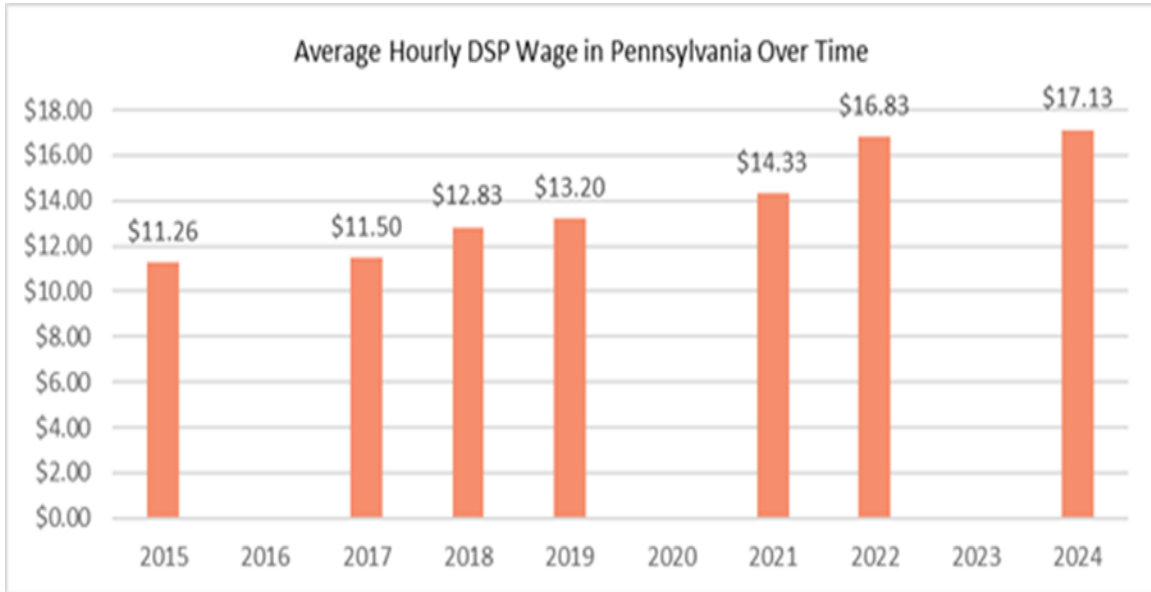


Figure 1. Average Hourly DSP Wage in Pennsylvania Over Time

Turnover is a frequently cited metric with which to describe the characteristics of a workforce. The basic formula is the number of employees who left within a given time frame divided by the number of employees working. It should be recognized that this formula does not take vacancy rate into account. Because of this, in situations with relatively high vacancy rate, turnover will be spuriously inflated. While this metric may be challenged on an accuracy basis, it can be used over time to monitor trends. The figure below (Figure 2) presents Pennsylvania turnover data across the seven surveys.

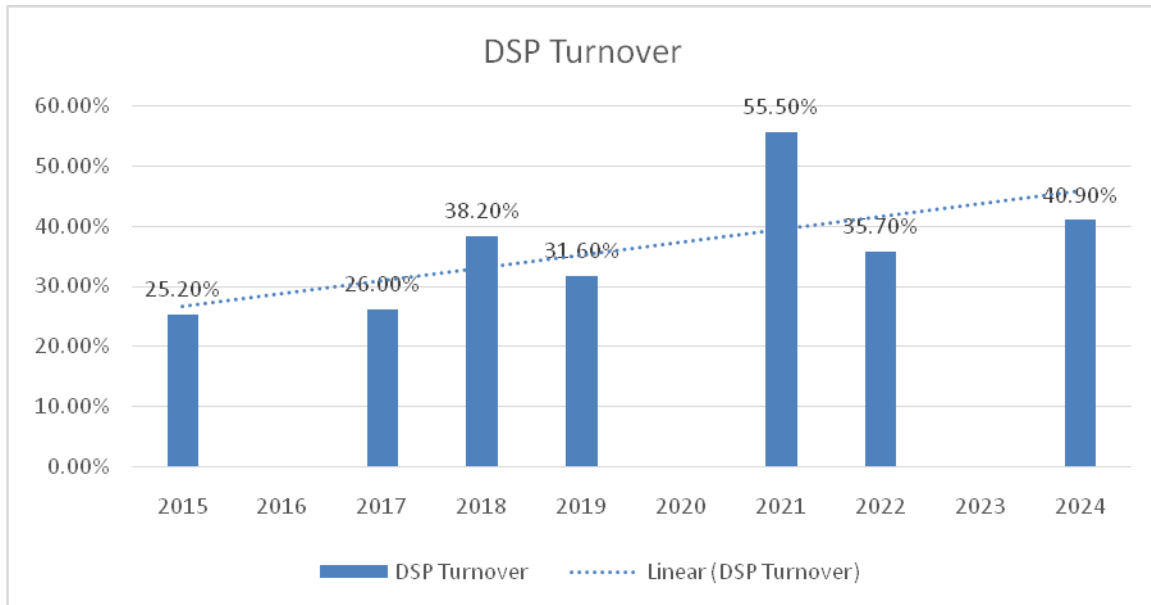


Figure 2. DSP Turnover over Time

The trendline suggests an increase in the annual turnover rate over time, however, it must be recognized that the turnover data from the primary pandemic year (2021) appear markedly different from other data and probably impacted the trendline. While the specific magnitude of change may be argued, it is clear that the rate of turnover appears to be worsening, at least slightly.

Vacancy rate is perhaps the preferable measure of the health of a workforce. The vacancy formula is simply the number of vacant slots divided by the number of vacant and filled slots. The inability to fill necessary slots is an existential threat, while turnover is essentially an expensive challenge. Vacancy data from the seven surveys is presented below in Figure 3.

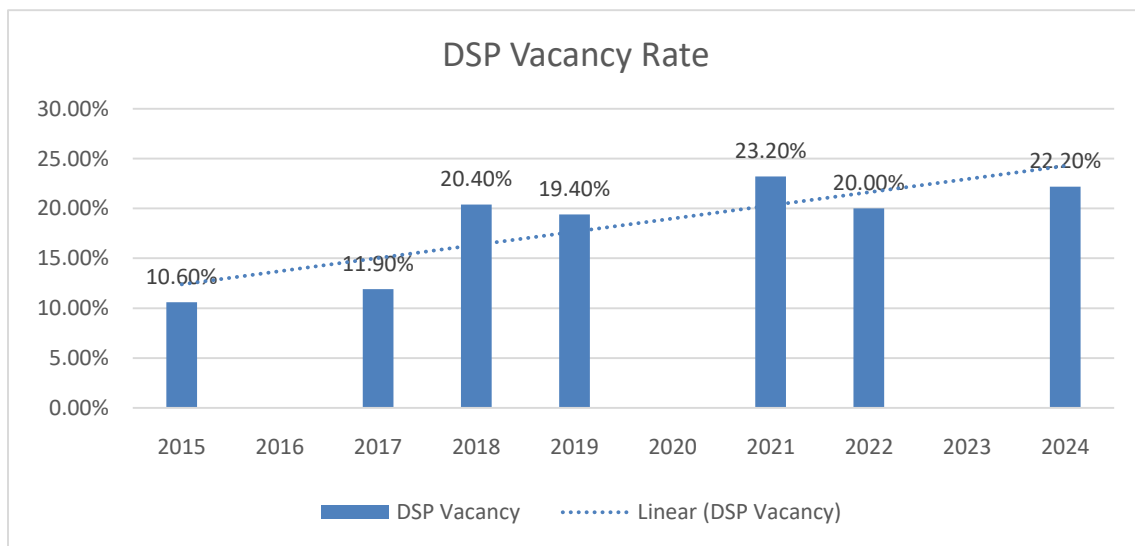


Figure 3. DSP Vacancy Rate

These data suggest that the DSP vacancy rate has almost doubled over the nine years of study (98%). A large increase was noted in 2018, and this large increase has essentially been maintained across the four subsequent surveys.

Summarizing across the three data sets, it appears that wages have increased more substantially than inflation, but the workforce metrics of turnover and vacancy rate actually worsened. This is the same general pattern noted in the national studies performed by the National Core Indicators Project (2015-2023). While one might reasonably speculate that an increase in wages should reduce the workforce challenge, one must also note that the wage increase would have to be sufficient to notice. In 1914, when Henry Ford was faced with a massive turnover problem in his plants, he doubled his hourly wage and resolved the problem ((Worstell, 2015; Nilsson, 2014; Spreat, 2022a). In the 1960s, San Francisco was unable to hire trash haulers. They increased wages enough to encourage people to move to San Francisco to become trash haulers (Perry, 2017)). There is clearly evidence that wages can impact the equilibrium between supply of and demand for employees. It is perhaps reasonable to suggest that the raises offered in Pennsylvania were insufficient to have the desired effect.

4. Discussion

The “right” wage to create this equilibrium is an empirical question. Because the supply of DSPs has always consistently lagged about 10% behind the demand (Spreat, 2023), we do not have proper data with which to make a prediction. The larger point is that advocacy efforts to increase DSP wages shouldn't focus on a living wage or achieving the same pay as state workers. The "right " wage for a DSP is the wage that fills all or almost all of the available DSP positions.

The pragmatic question must be whether any sort of substantial increase in rates can be anticipated. Note that because about 75% of intellectual disability provider budgets are devoted to the costs of staffing, it would take about a 75% increase in revenue in order to double DSP wages. And, of course, there is nothing sacred about the notion of doubling wages; Henry Ford did that, but perhaps he would have achieved the same goal with a lesser increase.

It seems unlikely that continued begging and lobbying will resolve the workforce crisis. Creativity on the part of the providers, perhaps supplemented by the passing of the Baby Boomer generation (Thaler,2018) will likely be the only alternatives that might produce some limited success. Consider the options listed below as means to either increase the supply of DSPS or to reduce the demand for DSPs.

1. Targeted Immigration – Efforts to increase wages for Direct Support Professionals are essentially trying to increase the supply of DSPs by traditional methods, by using wages to increase supply. Clark, Taylor-Cook, Farry, Hansen-Turton, & Spreat (2023) have proposed an alternative strategy with which to increase the supply of DSPs. They noted in urban areas, there are already a high concentration of foreign born DSPs (Espinosa, 2017). Clark, et. Al (2023) propose to, rather than waiting for people to immigrate to the United States, to actively recruit them in the home land. Historically, targeted immigration operated to limit immigration, as in the Chinese Exclusion Act of 1992 (History, undated). More recently, President Joseph Biden authorized the deportation of immigrants who posed a threat to national security or who had significant criminal histories (NBC news, undated. Clark, et. Al (2023) have reversed the logic of this approach, suggesting that the United States selectively invite immigrants who would be able to help alleviate a societal shortcoming. The idea, while perhaps novel to the United States, is hardly new. Israel, Japan, and Canada have developed cross border strategies to address the growing demand for professionals to address the support needs of citizens. Nacer and McKee (2022) noted that the United Kingdom has long depended on recruiting healthcare professionals from other European countries. (Canada has even developed a pathway to citizenship for Home Support Workers (Kumar & Dempster, 2021). Israel, while employing a targeted immigration approach, does not offer an equivalent pathway to citizenship.

The national intellectual disability provider association, ANCOR, has proposed a variant of targeted immigration as one means of alleviating the workforce crisis. One provider agency, Woods System of Care, has already initiated the process, actively recruiting new employees in Liberia and Nigeria. The process involved with that agency was expensive, perhaps

prohibitively expensive for smaller providers. Additional legislative actions will be needed to encourage targeted immigration.

Clark, Taylor-Cook, Farry, Hansen-Turton, & Spreat (2023) noted that targeted immigration should be viewed as a stop-gap measure that will help sustain the intellectual disability system for the immediate future. Concern was expressed that if successful, this approach would relieve the state legislatures from their collective responsibilities to support people with disabilities. Concern was also raised that the process could be viewed as a form of colonialism in which foreign nationals are invited to accept an insufficiently funded position, rather than paying the appropriate wage that would sustain a workforce.

2. Enhanced Educational Benefits – Diamond and Drummond (2020) acknowledged that it is unlikely that legislatures will sufficiently fund social service programs to eliminate the workforce crisis. They, in turn, examined the nature of the DSP position. For some proportion of individuals holding that job, it will be a career occupation. For others, it will be a stepping stone to positions with increased levels of compensation. Diamond and Drummond have suggested an increased focus on these individuals, suggesting that enhanced, reduced price educational benefits be made available to DSPS. The authors noted that their program established linkages with local universities to offer reduced tuition programs at associates, bachelors, and masters level. They offer data that strongly suggest that participation in such educational programs is associated with increased retention levels. They also noted an increased sense of belongingness, probably attributable to the fact that the classes were offered to cohorts of students who progressed through the programs together. With the continually rising cost of college education (Note that the annual cost of Rutgers University is just under \$35,000 when tuition, books, and living expenses are considered), this may become an increasing attractive options for middle class families. The shortcoming is that it may promote turnover in a field that is largely based on relationships, but it must be recognized that the revolving door is already spinning wildly.

3. Increased Engagement Through Participatory Management- Employee engagement studies within the Intellectual Disability/Autism industry consistently reveal that employees working in lower rungs of the organization feel excluded from decision making. While this may be an entirely legitimate way of life, there are ways in which to increase employee involvement while not jeopardizing the welfare of the organization. Hansen-Turton (personal communication) has reported on the creative use of funds that currently exist in her program's endowment. She dedicated a relatively small number 10-20 thousand per year) to special projects. Groups of lower level employees are encouraged to generate proposals for projects of their interest. The development of these projects is supported by a consultant to Hansen-Turton's agency, so the employees have the opportunity to learn budgeting and planning, as well as learning the strengths and weaknesses of their ideas. Each year, 10-12 groups of employees compete for funding (most receive some funding). The projects have included gardening opportunities for clients, a transportation coordination plan, a staff credentialing plan, and a system to identify community based resources.

No studies have been done on the impact of these competitions, but it is clear that the products of the projects have benefitted both the people who live within Hansen-Turton's program and the people who work within that same program.

4. Increased use of Electronic Supervision – The continuing demand for Direct Support Professionals has led some provider agencies to seek technological solutions (Neimeijer, Frederiks, Depla, Eefsting, & Hertogh, 2012). At the simplest level, these technological supports might include communication devices, and other electronic forms of assistance. At a more intrusive level, the technologies might include GSP monitoring, overnight supervision, and a variety of smart home strategies.

The literature contains a number of demonstration articles, but a search was unable to locate any formal outcome analysis that demonstrated significant cost savings via this approach. This, however, does not imply that such savings are not to be found, but rather, that summative research is required. The use of electronic surveillance within the intellectual disability field highlights the longstanding challenge of attempting to balance safety and autonomy. Concerns have been raised about the appropriateness of electronic surveillance strategies on both ethical and safety grounds (Niemeijer, Depla, Frederiks, & Hartogh, 2014)

5. Pay Families to keep Family Members at Home – Most states allow family caregivers to receive compensation for providing personal care to family members. These programs are typically administered through a Medicaid waiver program. It appears that the COVID-19 pandemic led more states to implement this model as a way of both promoting safety of people with disabilities and of dealing with the heightened workforce crisis (Burns, Mohamed, & Watts, 2023) . With the current easing of the pandemic, it appears that many states will retain at least some portion of this model.

There can be little question that paying a family to care for a loved one is going to be less expensive than residential care. It would seem that the key question would be one of inclusion and perhaps the safety of the individual receiving care

6. Contribute to Supportive Legislators – A Political Action Committee (PAC) is a tax exempt organization that solicits contributions from its members and allocates these contributions to support political candidates and/or political initiatives. Although PACs certainly seem to have the appearance of something at least slightly similar to bribery, they are highly monitored and remain legal. Despite this legality, many in the social services field are reluctant to participate in PACs , with their resistance being based largely on moral grounds. Social service leaders need to more fully accept the responsibility to help shape the operations of legislative bodies to the benefit of the individuals with intellectual disability.

7. Increased Reliance on Adult Foster Care – Adult foster care (sometimes called Life Sharing) offers the potential of significantly reduced costs and reduced staffing demands. In adult foster care, and individual with intellectual disability is placed within a home setting in the community and afforded the opportunity to live as a member of that family. In generally, this is not an intensively staffed model, and clearly, not an option for all individuals who have intellectual disability. An example of Life Sharing might be found in David, a psychologist who worked in the intellectual disability field, his wife (a social worker), and his teenage daughter. They opened their home to a late adult man who worked in a workshop. His supervision needs were minimal. He needed someone to make sure that safely got to work, kept doctor's appointments, and had food and clean clothes. For their support, David and his wife earned about \$28,000 per year. To this figure, add the likely costs of a day program of perhaps \$19,000 per year). To give perspective on this, note that

the annual cost in a Pennsylvania state developmental center (National Council on Disabilities, undated) was \$220,905 in 2009 (\$316,802 in 2023 dollars; Inflation calculator, undated) . The potential savings are overwhelming, but it must be recognized that not all individuals can be appropriately supported within a life sharing model. Intense behavioral challenges, excessive medical needs, and/or the need for 1:1 constant supervision would seem to be exclusionary criteria for life sharing. Despite these limitations, it is clear that the potential cost savings (that could be diverted to other elements of the workforce crisis) are staggering. Quality concerns evident in child foster care programs are perhaps likely to become a concern in life sharing programs.

8. Reduce Regulatory Expectations – While regulations may have initially been conceived as a guarantor of basic health and safety (Russell Rice, personal communication), they have largely become prescriptive of literally every action that may occur within a residential program. One can reasonably argue that the purchaser of a service is entitled to place whatever expectations for service quality that suits them. In most cases, however, the purchaser of a service does not determine the price. In the Intellectual Disability field, prices for services and supports are largely determined by the purchaser (the state). These regulatory expectations in some cases will siphon expenses that might otherwise be used to improve program efforts by reducing the workforce crisis. Clearly, health and safety regulations need to be retained, but a critical review of the regulatory process might identify low impact regulations, the elimination of which might free funds for the workforce. In a sense, reducing regulations would reduce the demand for the regulatory inspectors and insurers, thereby freeing funds for Direct Support Professionals.
9. Open for Profit Businesses to Support the Social Agencies – This is admittedly a low probability option that is fraught with legal and tax difficulties. Diversification into other program areas that are equally beset with a workforce crisis will solve nothing. Asking legislatures for sufficient funds to rectify the workforce crisis seems unlikely to yield positive results. One option on the table is to start profitable businesses that essentially adopt the non-profit agencies.

One colleague was able to open a bowling alley and staff it with clients. He used the profits from the bowling alley to supplement the budget for his non-profit day program that supported people with intellectual disability. It also provided a number of them with employment. A similar sort of model has been employed in Israeli kibbutz' that support people with intellectual disability.

It seems unlikely that any one of the recommendations will eliminate the workforce crisis. The recommendations are offered in the hopes that their implementation might somewhat ease the crisis and help ensure the continuation of supports and services to people with intellectual disability. Ultimately, only a significant increase in funding will ensure the sustainability of the system.

It must be recognized that the seven surveys were not truly longitudinal, and they were collected in a single state. The commonality of these findings and those presented in a series of reports from the National Core Indicator Project suggest a reasonable degree of validity to the assertion

that wages have increased, but the wage increase has not positively impacted traditional workforce metrics of turnover or vacancy rate.

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