

It's Time to Resolve the Direct Care Workforce Crisis in Long-Term Care

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Abstract

Nearly 4.5 million direct care workers—including personal care aides, home health aides, and nursing assistants—provide daily support to older adults and people with disabilities across a range of settings in the United States, predominantly in long-term care (LTC). Even as the population grows older and drives up demand for LTC, the sector continues its decades-long struggle to fill direct care positions and stabilize this essential workforce. Recent events and emerging trends have converged, however, to produce new opportunities to address this longstanding workforce crisis, including the unprecedented attention generated by the coronavirus disease 2019 (COVID-19) pandemic and the systemic shifts to managed care and value-based payment in LTC. This Forum article outlines the pressing direct care workforce challenges in LTC before describing these potential levers of change, emphasizing the importance of not just expanding the workforce but also maximizing direct care workers' contributions to the delivery of high-quality services for a growing and evolving population of LTC consumers.

Keywords: Workforce issues, Healthcare policy, Managed care, Value-based payment, COVID-19

Direct care workers provide daily support to millions of older adults and people with disabilities across long-term care (LTC) settings in the United States. For decades—dating back to 1965, when long-term services and supports were placed under the auspices of Medicaid, a means-tested social assistance program (Scales, 2020)—LTC leaders have struggled to resolve persistent challenges facing this workforce, including untenably low wages, limited training and career development opportunities, and high turnover. With the U.S. population growing older and nearly half of those reaching the age of 65 requiring paid LTC in their lifetime (Johnson, 2019), more direct care workers are critically needed. However, these workforce challenges continue to undermine recruitment and retention efforts, leaving countless individuals who require LTC at risk of unmet needs and adverse health and wellbeing outcomes (Kaye, Harrington, & LaPlante, 2010).

Although the pace of change has been dishearteningly slow overall—due to the widespread devaluation of the direct care role coupled with political barriers to increased investment in LTC—momentum to address direct care workforce issues has recently been growing. During the presidential primary season in 2019-2020, a number of Democratic candidates included LTC in their policy platforms and spoke cogently about the importance of investing in the direct care workforce, calling for measures including “secure passage of legislation... to make these jobs more fair and safe,” “workforce growth, stabilization, and training,” and “expanding benefits and increasing wages for our direct care workers” (Iowa CareGivers, 2019; Biden, 2020).

More recently, the coronavirus disease 2019 (COVID-19) pandemic generated unprecedented awareness of the value and precarity of the LTC system and its workforce. The marginalized status of direct care workers was revealed through reports about their inadequate access to personal protective equipment (PPE), relevant training, paid sick leave, and other supports

(Lyons, 2020). The thin spread of the workforce became obvious as LTC providers struggled to maintain services without enough workers (Almendrala, 2020). And as nursing homes and other congregate settings experienced staggering outbreaks (The New York Times, 2020), it became impossible to overlook direct care workers' essential role in providing care in place for those most at risk from the disease.

This Forum article begins by outlining the historic and anticipated growth of the direct care workforce and describing entrenched workforce challenges. The article then explores the convergence of recent events and broader trends—including the shifts toward managed care and value-based payment—that have generated new opportunities to invest in direct care jobs and elevate the workforce in both policy and practice.

The definition of an essential workforce

Direct care workers—including personal care aides, home health aides, and nursing assistants, following the Bureau of Labor Statistics' occupational classification system—provide assistance with activities of daily living (ADLs) and instrumental activities of daily living (IADLs) to older adults and people with disabilities across diverse settings. These settings include private homes and congregate settings in the community (referred to collectively as home and community-based services, or HCBS) and nursing homes (historically referred to as “institutional settings”), as well as settings outside LTC (including hospitals). The support they provide is essential for enabling individuals with personal assistance needs to fulfill daily tasks and maintain their health, functional abilities, and wellbeing to the extent possible.

Direct care is physically demanding work, leading to disproportionately high rates of occupational injury (Khatutsky et al., 2012; Quinn et al., 2016), and also requires considerable relational skills and emotional labor (Duffy, Armenia, & Stacey, 2012; Lopez,

2006). As LTC consumers' acuity has increased across settings (Harris-Kojetin et. al., 2019; Scales, 2020), the direct care role has also become more complex—albeit with variation by occupational role and state-level laws and regulations (Reinhard et al., 2017; Spetz, 2019). Supporting individuals with Alzheimer's disease and other dementias has become a central remit of LTC, reinforcing the need for effective interpersonal skills as well as technical understanding about how to avoid or address distressing behavioral and psychological sequelae (Gilster, Boltz, & Dalessandro, 2018). Increasing recognition of the prevalence of loneliness and social isolation among older adults has also underscored the relational importance of the direct care role (National Academies, 2020).

Very few aspects of direct care can be substituted with remote supports like telehealth (Hess & Hegewisch, 2019)—a reality that became obvious during the coronavirus pandemic, as direct care workers continued to provide hands-on care to those most vulnerable to the virus. Without adequate access to PPE and additional supplies and support, direct care workers also faced considerable personal health risks on the job. At the time of writing, at least 43% of deaths related to COVID-19 in the United States were among LTC residents and staff (The New York Times, 2020), nearly 140,000 staff in nursing homes alone had suspected or confirmed infections, and 564 had died (CMS, 2020a). These figures would be considerably higher if it were possible to estimate the prevalence of infection among direct care workers across all LTC settings, including in home and community-based settings.

A diverse and growing workforce

The direct care workforce comprises nearly 4.5 million workers in the United States, including almost 2.3 million home care workers, about 720,000 direct care workers in residential settings, and just over 581,000 nursing assistants in nursing homes (PHI, 2019). (Nearly 900,000 direct care workers are found in other health-care settings.) Direct care

workers are predominantly female (86%) and people of color (59%), just over a quarter (26%) are immigrants, and educational attainment is fairly low across the workforce (49% have a high school education or less).

This demographic profile reflects the legacy of caregiving as the responsibility of unpaid and low-paid women in the home and the concentration of people of color in low-wage occupations, and is tied inextricably to the ongoing challenges of bringing direct care from the margins of the health and LTC system into a more recognized, valued position (England, 2005; Osterman, 2017; Palmer & Eveline, 2012). Further inequities persist within the direct care workforce, with workers of color earning less than white workers and more likely to live in poverty, work in under-resourced settings, and experience strain and burnout (Scales, 2020; Shippee et al., 2020). Direct care workers of color, including immigrant workers, have also faced greater risks during the pandemic, given the disproportionate impact of the virus on communities of color (CDC, 2020; Shippee et al., 2020).

With population aging and increased longevity driving up demand for paid LTC, the supply of direct care workers (who provide the bulk of these services) has grown considerably in recent years—with the workforce nearly doubling in the past decade alone (PHI, 2019).

Given the “rebalancing” of LTC services from nursing homes to home and community-based settings (Ryan & Edwards, 2015), the majority of new direct care jobs have been in home care: the number of home care workers grew by 151% and the residential care workforce grew by 33% during the last decade, while the number of nursing assistants in nursing homes contracted by 3% (PHI, 2019).

Looking ahead, the direct care workforce is expected to add 1.3 million more new jobs from 2018 to 2028, including over one million home care jobs—more new jobs than any other occupation in the country (PHI, 2019). The LTC sector will also need to fill nearly seven

million additional jobs during the same period as existing workers move into other occupations or exit the labor force. Countless more workers will churn between similar jobs, for example moving from one home care agency to another. Although it is impossible to quantify the number of vacant direct care positions nationwide given the inadequacy of existing workforce data (Edelstein & Seavey, 2009), reports from the field indicate that high demand coupled with high turnover have produced a severe workforce shortage in LTC. For example, a recent survey of LTC providers in Wisconsin found a direct care vacancy rate of nearly 25%, with one in three providers limiting services due to the workforce shortage (WHCA/WiCAL et al., 2020).

Serious workforce challenges persist

Despite ever-rising demand for direct care workers, the quality of their jobs remains persistently low, which impedes recruitment and retention efforts across the LTC industry. The median wage for direct care is just \$12.27 per hour—with an increase of only three cents over the past decade, adjusted for inflation—and median earnings are only \$20,200 per year (PHI, 2019). As a result, 44% of the workforce live below 200% of the federal poverty level and 42% rely on public assistance.

Beyond low compensation, direct care jobs are physically and emotionally demanding and, with some variation across setting, often characterized by heavy workloads, scheduling challenges, inadequate supervision, and limited training and career advancement prospects. These and other job-quality limitations contribute to job dissatisfaction and high rates of turnover (Brannon et al., 2007; Ejaz et al., 2008; Franzosa, Tsui, & Baron, 2019; Kemper et al., 2008; Stone et al., 2017). In turn, workforce instability undermines care quality (Castle, Hyer, Harris, & Engberg, 2007; Newcomer, Kang, & Faucett, 2011; Russell et al., 2013; Temkin-Greener & Cen, 2020).

Given the poor quality of direct care jobs, LTC employers struggle to compete for workers (especially in tight labor markets) against employers from other sectors that can offer higher wages, more stable schedules, less arduous work, or other advantages. Because LTC is predominantly funded through Medicaid and other public dollars (Watts, Musumeci, & Chidambaram, 2020), LTC providers—especially those that primarily rely on Medicaid reimbursement—operate on tight margins that allow very little scope for raising wages or making other job-quality investments, compared to these competing employers.

The COVID-19 pandemic turned the previously robust labor market inside out, with the unemployment rate spiking to nearly 15% in April 2020 (Schwartz, Casselman, & Koeze, 2020). The significant job loss incurred during the pandemic is likely to boost recruitment and retention in LTC, even without job-quality improvements—as displaced workers search for available jobs, secondary wage earners join the labor market, and existing direct care workers stay in their current jobs. For example, one home care franchise reported being able to hire up to 500 new caregivers per week in April 2020, primarily recruiting workers who had been laid-off from retail and food services jobs (Bryant, 2020). Although high unemployment rates may stabilize the direct care workforce in the short term—and potentially improve LTC quality, as seen in previous recessions (Huang & Bowblis, 2019)—these gains will be temporary unless matched by sustained improvements in direct care job quality.

New opportunities to invest in direct care workers

After decades marked by these cyclical but enduring challenges, however, the current moment offers new opportunities to transform direct care jobs and the workforce.

Translate emergency responses into lasting improvements

The devastating impact of COVID-19 on LTC brought to light the sector's deep-rooted weaknesses—including inadequate funding, inconsistent guidance and oversight, poor coordination, and more (Campbell, 2020). As a result, the pandemic catalyzed short-term actions that could, with perseverance and political will, translate into lasting improvements in the sector.

One example is higher compensation for direct care workers. During the pandemic, a number of states and individual employers implemented hazard pay for direct care workers in recognition of their essential frontline role (e.g., Arkansas Governor's Office, 2020). It is difficult to estimate the prevalence of these hazard pay policies; for example, as of June 2020, we know that 32 states had temporarily increased provider payment rates through their 1915(c) home and community-based services waivers (KFFa, 2020), but these enhanced payments may or may not have translated into higher wages for workers, depending on the state and/or individual provider. Nonetheless, the example set by certain states could be leveraged to advocate for a new baseline wage for direct care workers that better reflects their ongoing contribution (Sudo, 2020).

Higher wages are far from the only solution for stabilizing the direct care workforce; retention is driven by a mix of factors, including supportive supervision, flexible scheduling, the intrinsic rewards of caregiving, career development opportunities, and more (Brannon et al., 2007; Huang & Bowblis, 2018; Mittal, Rosen, & Leana, 2009; Rakoviski & Price-Glynn,

2010; Stearns & D'Arcy, 2008). However, ensuring that direct care offers a living wage is an important step toward raising the value and competitiveness of these jobs. Timely research documenting the impact of the pandemic on recruitment and retention in direct care, with a particular focus on compensation (including hazard pay and enhanced unemployment benefits), could help build this case. Other workforce measures introduced during the pandemic—such as new recruitment sites, streamlined hiring and onboarding protocols, and technology-based training approaches—should also be mined for lessons learned about how to improve recruitment and retention in the longer term.

Sustained wage increases and other workforce investments will be exceedingly difficult to implement in light of the budget constraints that will endure far beyond the pandemic, especially if high unemployment temporarily eases recruitment and retention concerns. Therefore, it will be critical to embed the argument for job-quality improvements in broader efforts to improve the financing and sustainability of LTC services. In the near term, these efforts must include investing more federal and state dollars in Medicaid, the *de facto* primary payer for LTC, to better equip the sector to meet current demand and withstand future crises. In the longer term, the heightened attention on LTC generated by the pandemic could be leveraged to garner support for more substantive funding and regulatory changes (Lepore, 2019)—to ensure that older adults and people with disabilities can access the services they need regardless of financial status, geography, choice of setting, and other factors, and to support a sufficient supply of well-trained, adequately compensated workers to provide such services.

Leverage the workforce through new payment models

Two trends within the broader health-care landscape open additional opportunities to better value and elevate the direct care workforce. First is the shift to managed care, whereby

Medicare, Medicaid or another payer provides capitated payments to managed care organizations to serve designated groups of consumers.

As care coordinators, managed care organizations are well-positioned to invest in direct care workers, in order to ensure that these so-called “eyes and ears” of the care team are properly prepared to observe and report changes that may lead to costly outcomes if not promptly addressed (Stone & Bryant, 2019). Upskilling workers to fulfill this role effectively requires additional training beyond the entry-level minimum, including training on the signs, symptoms, and management of specific conditions and on interdisciplinary communication, among other topics—along with strengthened communication and supervisory systems (Drake, 2020; Scales, 2019). To generate a return on investment, upskilling must also be matched by other provider- and systems-level efforts to improve job quality and thereby to retain direct care workers in their jobs and in the field.

Managed care organizations may go further by developing advanced roles that enable experienced direct care workers to take on more responsibility for strengthening care delivery and outcomes (Drake, 2020; Osterman, 2017). As one modest example, the Care Connections Senior Aide role was created through a managed care plan in New York City in 2015 to help upskill entry-level home care workers, strengthen interdisciplinary communication, and improve care transitions for consumers (Falzon, 2017). Pilot-testing of the model showed a reduced rate of emergency room visits among clients as well as lower family caregiver strain and improved job satisfaction among workers.

Although upskilling and empowering direct care workers can enhance job quality and job satisfaction, thereby both directly and indirectly improving health outcomes for consumers (Barry, Brannon, & Mor, 2005; Butler et al., 2014), the potential contribution of managed care organizations to workforce development must be supported by government regulation

and oversight (as in Arizona and Pennsylvania, as two examples: AHCCCS, 2018; Twomey, 2019). Otherwise, the prevailing incentive to contain costs and increase profits may instead lead to deleterious workforce outcomes, such as lower wages, fewer hours, and less stability. In the context of the pandemic, for example, Medicaid managed care plans appeared to be in a “financially advantageous situation” as enrollment rates increased while utilization rates decreased (Cantor et al., 2020)—but these gains did not necessarily translate to providers (and from there to workers), who were struggling with lost revenue and increased operating costs, except where states directed the plans to pass payments through to providers in prescribed ways (KFFb, 2020).

The incremental emergence of value-based payment arrangements in LTC represents a second potential opportunity to increase investment in the direct care workforce.

Emphasizing quality over quantity, value-based payment programs are designed to ensure that individuals receive the constellation of services they need to achieve the best possible outcomes at the lowest cost (CMS, 2020c). Value-based payment programs in LTC have so far prioritized physical health and acute care utilization rates; the main program for Medicare-registered nursing homes, for example, focuses on 30-day rehospitalization rates (CMS, 2020b). Consensus is still needed around other quality measures that are relevant for LTC—and sensitive to the contributions of direct care workers—including measures of function and independence; care transitions; quality of life; and community integration, among others (AELTCC, 2019; Bennett, Curtis, & Harrod, 2018).

Value-based payment could help accelerate the “retooling” of the LTC workforce that was recommended more than a decade ago (IOM, 2008)—*if* the role of direct care workers in improving care and saving costs is taken into account. For example, value-based payment could justify efforts to upskill the direct care workforce so that they are knowledgeable about

condition-specific signs and symptoms, able to report their observations through effective communication channels, and prepared to implement interventions to mitigate adverse outcomes. More broadly, value-based payments could be used to directly or indirectly incentivize upstream investment in wages and employment supports for direct care workers, to improve recruitment and retention and thereby minimize the discontinuities in care that compromise quality (Castle, Hyer, Harris & Engberg, 2007).

But as with managed care, there is no guarantee that value-based payment will help elevate the role of direct care workers. More evidence on the links between specific workforce investments and consumers' outcomes is still needed to substantiate the argument for enhancing direct care workers' contributions to quality improvement. Further, value-based programs must be structured to maximize providers' ability to participate as well as to incentivize workforce investments. For example, under the program mentioned above, nursing homes automatically receive a 2% cut in their Medicare reimbursement rates which they can earn back by improving their hospital readmission statistics. However, the vast majority of nursing homes have so far been penalized rather than rewarded by the program, which suggests that the potential rewards are not sufficient to incentivize the investments in staffing and other changes that are required to achieve them (Spanko, 2019). Moreover, the program rewards appear unevenly distributed, with nursing homes that primarily serve residents of color and Medicaid enrollees much less likely to benefit, indicating that the program may actually exacerbate the disparities faced by these residents and the workers who support them (Hefele, Wang, & Lim, 2019). In home and community-based settings, furthermore, value-based payment is unlikely to generate significant improvements without some degree of upfront funding—since providers that rely on limited public reimbursement rates will not be able to invest in the technology, training, and other workforce supports needed to generate performance improvements (Cook, 2019).

The potential of value-based payment programs to incentivize investments in the direct care workforce has been further curtailed during the pandemic, due to extensive (if temporary) changes to reporting requirements and payment methodologies made at the federal and state levels (CMS, 2020d). Despite these important caveats, value-based payment is likely to continue expanding into LTC in the future, suggesting that the workforce-improvement opportunities it offers must be explored and maximized.

A call to action

Although the direct care workforce crisis in LTC has proven so persistent as to seem unsolvable, the sector faces new opportunities to resolve this crisis, with direct care workers now part of the national dialogue and increasingly recognized for their essential role. Fulfilling these new opportunities will require garnering the political will to disrupt the status quo *and* harnessing all existing evidence to scale-up and sustain tested workforce interventions. The time is right to tackle these two challenges, the political and the technical, to achieve meaningful improvements in direct care workers' compensation, career development, care team integration, and contributions to outcomes-based care—for the benefit of workers themselves, the individuals they serve, and the broader health and LTC system.

References

- Advancing Excellence in Long-Term Care Collaborative (AELTCC). (2019). *Putting “value” back in value-based payment for skilled nursing facilities*.
<https://aeltcc.org/application/files/5715/7019/1335/Putting-Value-Back-In-Value-Based-Payment-For-Skilled-Nursing-Facilities.pdf>
- Almendrala, A. (2020, April). 'It hurts our soul': Nursing home workers struggle with thankless position. *Kaiser Health News*. <https://californiahealthline.org/news/it-hurts-our-soul-nursing-home-workers-struggle-with-thankless-position/>
- Arizona Health Care Cost Containment System (AHCCCS). (2018). AHCCCS contractor operations manual: 407 workforce development. Phoenix, AZ: AHCCCS.
- Arkansas Governor’s Office. (2020, April). Governor Hutchinson announces CMS approval of additional pay for eligible LTSS direct care workers due to COVID-19 emergency [Press release]. <https://governor.arkansas.gov/news-media/press-releases/governor-hutchinson-announces-cms-approval-of-additional-pay-for-eligible-ltss-direct-care-workers-due-to-covid-19-emergency>
- Barry, T., Brannon, D., & Mor, V. (2005). Nurse aide empowerment strategies and staff stability: Effects on nursing home resident outcomes. *The Gerontologist*, 45(3), 309-317. <https://doi.org/10.1093/geront/45.3.309>
- Bennett, A. D., Curtis, P., & Harrod, C. S. (2018). Bundling, benchmarking, and beyond: Paying for value in home- and community-based services. Millbank Memorial Fund.

<https://www.milbank.org/wp-content/uploads/2018/07/MMF-HCBS-Report-FINAL.pdf>

Biden, Joe. (2020, July). *The Biden plan for mobilizing American talent and heart to create a 21st century caregiving and education workforce*. Medium.

<https://medium.com/@JoeBiden/the-biden-plan-for-mobilizing-american-talent-and-heart-to-create-a-21st-century-caregiving-and-af5ba2a2dfeb>

Brannon, D., Barry, T., Kemper, P. Schreiner, A., & Vasey, J. (2007). Job perceptions and intent to leave among direct care workers: Evidence from the Better Jobs Better Care demonstrations. *The Gerontologist*, 47(6), 820-29.

<https://doi.org/10.1093/geront/47.6.820>

Bryant, B. (2020, June). *Market forecast: COVID-19's long-term impact on home care*.

Home Health Care News. <https://homehealthcarenews.com/2020/06/market-forecast-covid-19s-long-term-impact-on-home-care/>

Butler, S. S., Brennan-Ing, M., Wardamasky, S., & Ashley, A. (2014). Determinants of longer job tenure among home care aides: What makes some stay on the job while others leave? *Journal of Applied Gerontology*, 33(2), 164-88.

<https://doi.org/10.1177/0733464813495958>

Campbell, Stephen. (2020). *We can do better: How our broken long-term care system undermines care*. PHI.

<https://phinational.org/wp-content/uploads/2020/04/We-Can-Do-Better-2020-PHI.pdf>

Cantor, J., Tobey, R., Giron, N., & Kirui, T. (2020, June). *Medicaid managed care plans have an opportunity to play a key role in recovery*. Health Affairs blog.

<https://www.healthaffairs.org/doi/10.1377/hblog20200626.418552/full/>

Castle, N.G., Hyer, K., Harris, J.A. & Engberg, J. (2020). Nurse aide retention in nursing homes. *The Gerontologist*, 60(5), 885-895. <https://doi.org/10.1093/geront/gnz168>

Centers for Disease Control & Prevention (CDC). (2020, June). *COVID-19 in racial and ethnic minority groups*. <https://www.cdc.gov/coronavirus/2019-ncov/need-extra-precautions/racial-ethnic-minorities.html>

Centers for Medicare & Medicaid Services (CMS). (2020a, June). *COVID-19 nursing home data*. <https://data.cms.gov/stories/s/COVID-19-Nursing-Home-Data/bkwz-xpvg/>

Centers for Medicare & Medicaid Services (CMS). (2020b, April). *The skilled nursing facility value-based purchasing (SNF VBP) program*. <https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/Value-Based-Programs/SNF-VBP/SNF-VBP-Page>

Centers for Medicare & Medicaid Services (CMS). (2020c, January). *Value-based programs*. <https://www.cms.gov/Medicare/Quality-Initiatives-Patient-Assessment-Instruments/Value-Based-Programs/Value-Based-Programs>

Centers for Medicare & Medicaid Services (CMS). (2020d, March). CMS announces relief for clinicians, providers, hospitals and facilities participating in quality reporting programs in response to COVID-19. <https://www.cms.gov/newsroom/press-releases/cms-announces-relief-clinicians-providers-hospitals-and-facilities-participating-quality-reporting>

Cook, A. (2019). *Value-based payment and the home care workforce: What New York can teach other states*. PHI. <https://phinational.org/wp-content/uploads/2019/07/VBP-and-the-Home-Care-Workforce-2019-PHI.pdf>

Drake, A. (2020). *Direct care work is real work: Elevating the role of the direct care worker*.

PHI. <http://phinational.org/wp-content/uploads/2020/07/Direct-Care-Work-Is-Real-Work-2020-PHI.pdf>

Duffy, M., Armenia, A. & Stacey, C. L. (Eds.). (2015). *Caring on the clock: The complexities and contradictions of paid care work*. Rutgers University Press.

Edelstein, S. & Seavey, D. (2009). *The need for monitoring the long-term care direct service workforce and recommendations for data collection*. CMS National Direct Service Workforce Resource Center.

England, P. (2005). Emerging theories of care work. *Annual Review of Sociology*, 31, 381-399. <https://www.jstor.org/stable/29737725>

Ejaz, F. K., Noelker, L. S., Menne, H. L., & Bagaka's, J. G. (2008). The impact of stress and support on direct care workers' job satisfaction. *The Gerontologist*, 48(suppl_1), 60-70. https://doi.org/10.1093/geront/48.Supplement_1.60

Falzon, K. (2017, May). *One company's solution for filling the coming demand for home care providers*. Working Nation. <https://workingnation.com/one-companys-solution-filling-coming-demand-home-care-providers/>

Franzosa, E., Tsui, E. K., & Baron, S. (2019). "Who's caring for us?": Understanding and addressing the effects of emotional labor on home health aides' well-being. *The Gerontologist*, 59(6), 1055–1064. <https://doi.org/10.1093/geront/gny099>

Harris-Kojetin, L. D., Sengupta, M., Lendon, J. P., Rome, V., Valverde, R., & Caffrey, C. (2019). *Long-term care providers and services users in the United States, 2015-2016*. National Center for Health Statistics.

- Hefele, J. L. G., Wang, J., & Lim, E. (2019). Skilled nursing facility value-based purchasing program: Disparate impacts. *Innovation in Aging*, 3(Suppl 1), S63.
<https://doi.org/10.1093/geroni/igz038.243>
- Hess, C. & Hegewisch, A. (2019). The future of care work: Improving the quality of America's fastest-growing jobs. Institute for Women's Policy Research.
https://iwpr.org/wp-content/uploads/2019/09/C486_Future-of-Care-Work_final.pdf
- Huang, S. S., & Bowblis, J. R. (2019). Is the quality of nursing homes countercyclical? Evidence from 2001 through 2015. *The Gerontologist*, 59(6), 1044-1054.
<https://doi.org/10.1093/geront/gny148>
- Institute of Medicine (IOM). (2008). *Retooling for an aging America: Building the health care workforce*. National Academies Press.
- Iowa CareGivers. (2019). *Presidential candidates respond to questions about direct care workforce*. <https://www.iowacaregivers.org/uploads/pdf/q-and-a.pdf>
- Gilster, S. D., Boltz, M., & Dalessandro, J. L. (2018). Long-term care workforce issues: Practice principles for quality dementia care. *The Gerontologist*, 58(suppl_1), S103-S113. <https://doi.org/10.1093/geront/gnx174>
- Johnson, R.W. (2019). What is the lifetime risk of needing and receiving long-term services and supports? Urban Institute.
<https://aspe.hhs.gov/system/files/pdf/261036/LifetimeRisk.pdf>
- Kaiser Family Foundation (KFFa). (2020, July). Medicaid emergency authority tracker: Approved state actions to address COVID-19. <https://www.kff.org/coronavirus-covid-19/issue-brief/medicaid-emergency-authority-tracker-approved-state-actions-to-address-covid-19/#Table5>.

- Kaiser Family Foundation (KFFb). (2020, June). Options to support Medicaid providers in response to COVID-19. <https://www.kff.org/coronavirus-covid-19/issue-brief/options-to-support-medicaid-providers-in-response-to-covid-19/>
- Kaye, S., Harrington, C., & LaPlante, M.P. (2010). Long-term care: Who gets it, who provides it, who pays, and how much? *Health Affairs*, 29(1), 11-21.
<https://doi.org/10.1377/hlthaff.2009.0535>
- Kemper, P., Heier, B., Barry, T., Brannon, D., Angelelli, J., Vasey, J. & Anderson-Knott, M. (2008). What do direct care workers say would improve their jobs? Differences across settings. *The Gerontologist*, 48(suppl1), 17-25.
https://doi.org/10.1093/geront/48.Supplement_1.17
- Khatutsky, G., Wiener, J., Anderson, W., & Porell, F. W. (2012). Work-related injuries among certified nursing assistants working in US nursing homes. *RTI Press*.
<https://doi.org/10.3768/rtipress.2012.rr.0017.1204>
- Lepore, M. (2019). Financing long-term services and supports. *Generations*, 43(1), 10-17.
- Lopez, S. H. (2006). Emotional labor and organized emotional care: Conceptualizing nursing home care work. *Work and Occupations*, 33(2), 133-160.
<https://doi.org/10.1177/0730888405284567>
- Lyons, Amy. (2020, April). *Coronavirus has completely upended the lives of caregivers*. Courier. <https://couriernewsroom.com/2020/04/30/coronavirus-upended-caregivers/>
- Mittal, V., Rosen, J. & Leana, C. (2009). A dual-driver model of retention and turnover in the direct care workforce. *The Gerontologist*, 49(5), 623-634.
<https://doi.org/10.1093/geront/gnp054>
- National Academies of Sciences, Engineering, and Medicine. (2020). *Social isolation and loneliness in older adults: Opportunities for the health care system*. National Academies Press.

Newcomer, R., Kang, T., & Faucett, J. (2011). Consumer-directed personal care: Comparing aged and non-aged adult recipient health-related outcomes among those with paid family versus non-relative providers. *Home Health Care Services Quarterly*, 30(4): 178-197. <https://doi.org/10.1080/01621424.2011.622245>

The New York Times. (2020, June). 43% of U.S. coronavirus deaths are linked to nursing homes. *The New York Times*.

<https://www.nytimes.com/interactive/2020/us/coronavirus-nursing-homes.html>.

Osterman, P. (2017). *Who will care for us? Long-term care and the long-term workforce*. Russell Sage Foundation.

Palmer, E., & Eveline, J. (2012). Sustaining low pay in aged care work. *Gender, Work & Organization*, 19(3), 254-275. <https://doi.org/10.1111/j.1468-0432.2010.00512.x>

PHI. (2019, October). *Workforce data center*. <https://phinational.org/policy-research/workforce-data-center/>

Quinn, M. M., Markkanen, P. K., Galligan, C. J., Sama, S. R., Kriebel, D., Gore, R. J., Brouillette, N.M., Okyere, D. Sun, C., Punnett, L. Laramie, A.K., & Davis, L. (2016). Occupational health of home care aides: Results of the safe home care survey. *Occupational and Environmental Medicine*, 73(4), 237-245. <http://dx.doi.org/10.1136/oemed-2015-103031>

Rakovski, C. C. & Price-Glynn, K. (2010). Caring labour, intersectionality and worker satisfaction: An analysis of the National Nursing Assistant Study. *The Sociology of Health and Illness*, 32(3), 400-14. <https://doi.org/10.1111/j.1467-9566.2009.01204.x>

Reinhard, S., Accius, J., Houser, A., Ujvari, K., Alexis, J. & Fox-Grage, W. (2017). *Picking up the pace of change: A state scorecard on long-term services and supports for older adults, people with physical disabilities, and family caregivers*. AARP Foundation.

http://www.longtermscorecard.org/~/_/media/Microsite/Files/2017/Web%20Version%20LongTerm%20Services%20and%20Supports%20State%20Scorecard%202017.pdf

Russell, D., Rosati, R. J., Peng, T. R., Barrón, Y., & Andreopoulos, E. (2013). Continuity in the provider of home health aide services and the likelihood of patient improvement in activities of daily living. *Home Health Care Management & Practice*, 25(1): 6-12.

<https://doi.org/10.1177/1084822312453046>

Ryan, J. & Edwards, J. C. (2015, September). Rebalancing Medicaid long-term services and supports. *Health Affairs Health Policy Brief*.

<https://doi.org/10.1377/hpb20150917.439553>

Scales, K. (2020). *It's time to care: A detailed profile of America's direct care workforce*. PHI.

Scales, K. (2019). *Envisioning the future of home care: Trends and opportunities in workforce policy and practice*. Bronx, NY: PHI. <https://phinational.org/wp-content/uploads/2020/01/Its-Time-to-Care-2020-PHI.pdf>

Schwartz, N. D., Casselman, B. & Koeze, E. (2020, May). How bad is unemployment? 'Literally off the charts.' *The New York Times*.

<https://www.nytimes.com/interactive/2020/05/08/business/economy/april-jobs-report.html>

Shippee, T. P., Akosionu, O., Ng, W., Woodhouse, M., Duan, Y., Thao, M. S., & Bowblis, J. R. (2020). COVID-19 pandemic: Exacerbating racial/ethnic disparities in long-term services and supports. *Journal of Aging & Social Policy*, 32(4-5): 323-333.

<https://doi.org/10.1080/08959420.2020.1772004>

Spanko, A. (2019, December). Proportion of skilled nursing VBP losers grows as 77% receive Medicare payment cuts. *Home Health Care News*.

<https://skillednursingnews.com/2019/12/proportion-of-skilled-nursing-vbp-losers-grows-as-77-receive-medicare-payment-cuts/>

Stearns, S. C., & D'arcy, L. P. (2008). Staying the course: Facility and profession retention among nursing assistants in nursing homes. *The Journals of Gerontology Series B: Psychological Sciences and Social Sciences*, 63(3), S113-S121.

<https://doi.org/10.1093/geronb/63.3.S113>

Stone, R. I. & Bryant, N. S. (2019). The future of the home care workforce: Training and supporting aides as members of home- based care teams. *Journal of the American Geriatrics Society*, 67(S2), S444-448. <https://doi.org/10.1111/jgs.15846>

Stone, R. I., Wilhelm, J., Bishop, C. E., Bryant, N. S., Hermer, L. & Squillace, M. R. (2017). Predictors of intent to leave the job among home health workers: Analysis of the National Home Health Aide Survey. *The Gerontologist*, 57(5), 890-899.

<https://doi.org/10.1093/geront/gnw075>

Sudo, C. (2020, May). Kendal CEO: Covid-19 could drive permanent wage increases, university partnerships. *Senior Housing News*.

<https://seniorhousingnews.com/2020/05/03/kendal-ceo-covid-19-could-drive-permanent-wage-increases-university-partnerships/>

Temkins-Greener, H. & Cen, X. (2020). Nursing home staff turnover and perceived patient safety culture: Results from a national survey. *The Gerontologist*. Advance online publication. <https://doi.org/10.1093/geront/gnaa015>

Twomey, M. (2019). *State options for making wise investments in the direct care workforce*. Center for American Progress.

<https://www.americanprogress.org/issues/healthcare/reports/2019/04/10/468290/state-options-making-wise-investments-direct-care-workforce/>

Walton, A. L. & Rogers, B. (2017). Workplace hazards faced by nursing assistants in the United States: A focused literature review. *International Journal of Environmental Research and Public Health*, 14(5), 544. <https://doi.org/10.3390/ijerph14050544>

Watts, M. O., Musumeci, M. & Chidambaram, P. (2020). *Medicaid home and community-based services enrollment and spending*. Kaiser Family Foundation. <http://files.kff.org/attachment/Issue-Brief-Medicaid-Home-and-Community-Based-Services-Enrollment-and-Spending>

Wisconsin Health Care Association/Wisconsin Center for Assisted Living (WHCA/WiCAL), Wisconsin Assisted Living Association, LeadingAge Wisconsin, & Disability Service Provider Network. (2020). *The long-term care workforce crisis: A 2020 report*. https://www.wpr.org/sites/default/files/2020_workforce_report.pdf

Wunderlich, G. S. & Kohler, P. O. (Eds.). (2001). *Improving the quality of long-term care*. National Academy Press.

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