

Executive Summary: Health Impact Review of Funding the Wage and Retirement Components of the Individual Provider Home Care Contract & Agency Parity

Evidence indicates that funding the wage and retirement provisions of the 2015-2017 Individual Provider Home Care Contract would likely improve health outcomes for home care providers, thereby decreasing health disparities by race/ethnicity and income in Washington State.

CONTRACT INFORMATION

Summary of Contract:

- The 2015-2017 Individual Provider Home Care Contract is a tentative agreement between the State of Washington and SEIU 775 regarding individual providers who have contracted with the Department of Social and Health Services (DSHS) to provide personal care, respite care, or residential services as defined by [RCW 74.39A.240](#).
- This health impact review analyzes the likely health effects of the wage (Article 9) and retirement (Article 22) provisions of this contract.
- Article 9 creates a new wage scale under Appendix A of the contract. This new wage scale will increase the wages for caregivers twice a year over the next two fiscal years. This will lead to a 12 dollar wage in the second half of the 2017 fiscal year for providers with 700 or fewer hours of experience (currently \$11.06 per hour). This wage increases with experience so those at the top step of the scale with 16,001 or more hours of experience will earn \$15.40 per hour by the second half of the 2017 fiscal year (currently \$14.53 per hour).
- Article 22 requires that the State and SEIU 775 create and sponsor a joint labor and management (Taft-Hartley) defined contribution plan and trust fund. The State will contribute twenty-three cents per DSHS paid hour worked by all home care workers covered under the contract. The State must also make an initial grant of \$200,000 to fund the infrastructure of the trust fund.
- [RCW 74.39A.310](#) requires the hourly value of individual provider wages and benefits to be added to the home care agency vendor rate through a parity formula which must be used exclusively for improving the wages and benefits of home care agency workers (agency providers) who provide direct care.

HEALTH IMPACT REVIEW

Summary of Findings:

This health impact review found the following evidence regarding funding the wage and retirement components of the Individual Provider Home Care Contract:

- Very strong evidence that funding the wage provisions will improve health outcomes for home care providers and their families.
- A fair amount of evidence that funding the retirement provisions will improve health outcomes for home care providers.
- Very strong evidence that improving health outcomes for home care providers and their families will decrease health disparities by race/ethnicity and income.

For more information contact:
(360)-236-4106 | hir@sboh.wa.gov
or go to sboh.wa.gov

Health Impact Review of Funding the Wage and Retirement Components of the Individual Provider Home Care Contract & Agency Parity

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Author: Sierra Rotakhina

Contributor/Reviewer: Christy Hoff

Reviewer: Michelle Davis

Reviewer: Kelie Kahler

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Introduction and Methods

A health impact review is an analysis of how a proposed legislative or budgetary change will likely impact health and health disparities in Washington State ([RCW 43.20.285](#)). For the purpose of this review ‘health disparities’ have been defined as the differences in disease, death, and other adverse health conditions that exist between populations ([RCW 43.20.270](#)). This document provides summaries of the evidence analyzed by State Board of Health staff during the health impact review of funding the wage and retirement components of the Individual Provider Home Care Contract & Agency Parity.

Staff analyzed these provisions of the contract and created a logic model depicting possible pathways leading from funding these provisions to health outcomes. We consulted with experts and conducted objective reviews of the literature for each pathway using databases including PubMed and Google Scholar. The term home care provider is used throughout this review to represent both individual providers (who are employed directly by the client to provide home care) and agency providers (who are employed by a home care agency to provide care).

The following pages provide a detailed analysis of the contract, a logic model, summaries of evidence, and annotated references. The logic model is presented both in text and through a flowchart (Figure 1). The logic model includes information on the strength of the evidence for each relationship. The strength-of-evidence is defined using the following criteria:

- **Not well researched:** the literature review yielded few if any studies or only yielded studies that were poorly designed or executed or had high risk of bias.
- **A fair amount of evidence:** the literature review yielded several studies supporting the association, but a large body of evidence was not established; or the review yielded a large body of evidence but findings were inconsistent with only a slightly larger percent of the studies supporting the association; or the research did not incorporate the most robust study designs or execution or had a higher than average risk of bias.
- **Strong evidence:** the literature review yielded a large body of evidence on the relationship (a vast majority of which supported the association) but the body of evidence did contain some contradictory findings or studies that did not incorporate the most robust study designs or execution or had a higher than average risk of bias; or there were too few studies to reach the rigor of ‘very strong evidence’; or some combination of these.
- **Very strong evidence:** the literature review yielded a very large body of robust evidence supporting the association with few if any contradictory findings. The evidence indicates that the scientific community largely accepts the existence of the association.

Staff made modifications to these criteria at the start of the 2015 legislative session beginning January 12, 2015. Therefore strength-of-evidence rankings may not be comparable between reviews completed before and those completed after this date. This review was subject to time constraints, which influenced the scope of work for this review. The annotated references are only a representation of the evidence and provide examples of current research. In some cases only a few review articles or meta-analyses are referenced. One article may cite or provide analysis of dozens of other articles. Therefore the number of references included in the bibliography does not necessarily reflect the strength-of-evidence. In addition, some articles provide evidence for more than one research question so they are referenced multiple times.

Analysis and the Scientific Evidence

Summary of the wage and retirement provisions of the Individual Provider Home Care Contract

- The 2015-2017 Individual Provider Home Care Contract is a tentative agreement between the State of Washington and SEIU 775 regarding individual providers who have contracted with the Department of Social and Health Services (DSHS) to provide personal care, respite care, or residential services as defined by [RCW 74.39A.240](#).
- This health impact review analyzes the likely health effects of the wage (Article 9) and retirement (Article 22) provisions of this contract.
- Article 9 creates a new wage scale under Appendix A. This new wage scale will increase the wages for caregivers twice a year over the next two fiscal years. This will lead to a 12 dollar wage in the second half of the 2017 fiscal year for providers with 700 or fewer hours of experience (currently \$11.06 per hour). This wage increases with experience so those at the top step of the scale with 16,001 or more hours of experience will earn \$15.40 per hour by the second half of the 2017 fiscal year (currently \$14.53 per hour).
- Article 22 requires that the State and SEIU 775 create and sponsor a joint labor and management (Taft-Hartley) defined contribution plan and trust fund. The State will contribute twenty-three cents per DSHS paid hour worked by all home care workers covered under the contract. The State must also make an initial grant of \$200,000 to fund the infrastructure of the trust fund.
- [RCW 74.39A.310](#) requires the hourly value of individual provider wages and benefits to be added to the home care agency vendor rate through a parity formula which must be used exclusively for improving the wages and benefits of home care agency workers (agency providers) who provide direct care.

Health impact of funding these provisions of the Individual Provider Home Care Contract

Evidence indicates that funding the wage and retirement provisions of the 2015-2017 Individual Provider Home Care Contract would likely improve health outcomes for home care providers, thereby decreasing health disparities by race/ethnicity and income in Washington State.

Pathways to health impacts

The potential pathways leading from funding the wage and retirement provisions of the Individual Provider Home Care Contract to decreased health disparities are depicted in Figure 1. There is very strong evidence that increased wages for home care providers will likely improve health outcomes for these employees and their families.¹⁻⁷ There is a fair amount of evidence that providing retirement benefits will improve health outcomes for home care providers.⁸⁻¹⁰ There is very strong evidence that improving health outcomes for home care providers will likely decrease health disparities by race/ethnicity^{1,2,11-16} and income.^{1-7,14,16,17}

Magnitude of impact

There are about 33,000 individual providers and 8,000 agency providers in Washington who will be impacted by this contract.¹⁸ These providers and their families will benefit directly from the wage increases and retirement benefits if these provisions are funded. The health benefits associated with increased wage and retirement benefits are meaningful and include improved oral health; lower rates of depression, acute and recurring infections, obesity, and mobility-limiting disabilities; and lower mortality risk.¹⁻¹⁰

Logic Model

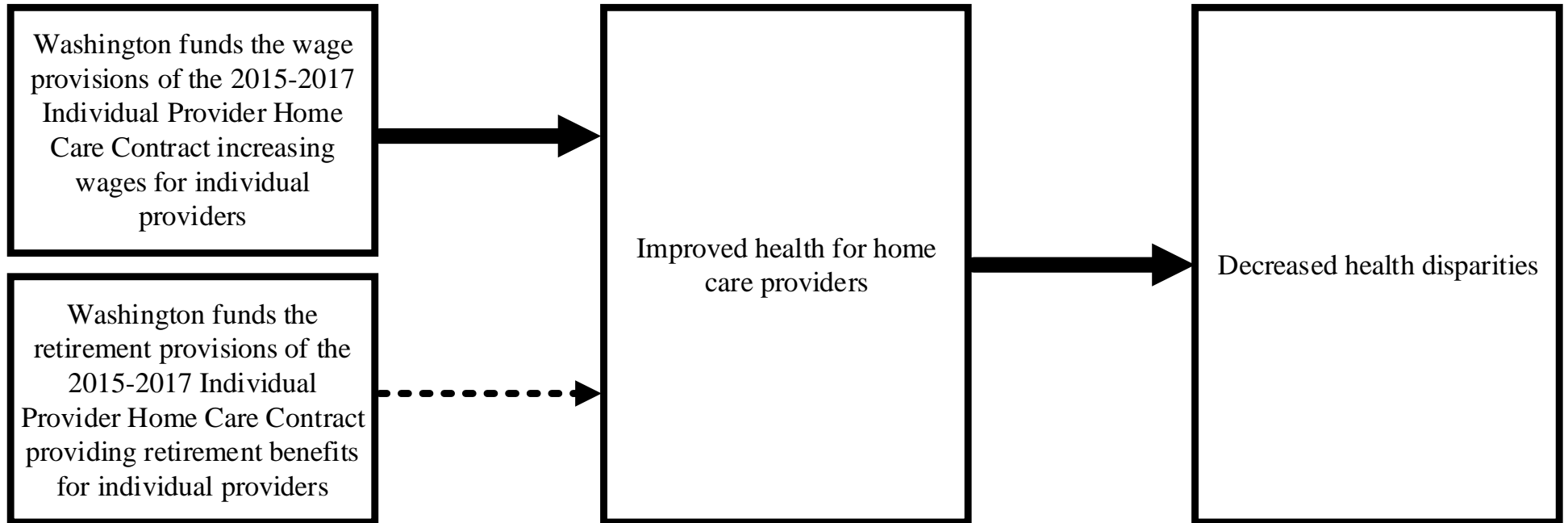
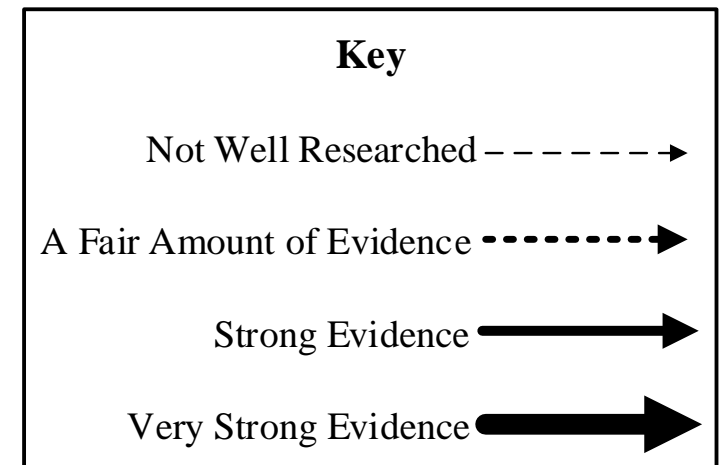


Figure 1
Funding the Wage and Retirement Components of
the Individual Provide Home Care Contract



Summaries of Findings

Will increasing wages for home care providers improve health outcomes for these providers?

There is very strong evidence that increased income is associated with improved health outcomes for employees and their families. There is a very large body of robust evidence supporting the association between income and health. The research shows a relationship between low income and, for example, depression, acute and recurring infections, poor overall health-status, higher body mass index (BMI), and poor oral health.¹⁻⁷ Low socioeconomic status in the first five years of life also has negative health outcomes in later childhood and adolescence.⁵ Data indicate that this correlation between low income and poor health does exist in Washington State.^{1,2,4,7}

Will providing retirement benefits to home care providers improve health outcomes for these providers?

There is a fair amount of evidence that retirement benefits are associated with improved health outcomes for beneficiaries. Retirement, pension, Social Security, and Supplemental Security Income benefits have been linked to decreased mobility-limiting disabilities and mortality among older adults.⁸⁻¹⁰ Due to time limitations we focused this literature search specifically on studies analyzing the direct connection between retirement-type benefits and health among older adults and did not expand the scope to include the effects of retirement benefits on increased income/economic security among older adults and the link between economic security and improved health. Including publications on these additional aspects would likely further bolster the evidence for the link between retirement benefits and positive health impacts.

Will improving health for home care providers decrease health disparities?

There is very strong evidence that improving health for home care providers will decrease health disparities. Provider data from SEIU 775 shows that home care providers in Washington State are more racially diverse, are less likely to be white, and are more likely to have been born outside of the U.S. than the general state population.^{16,18} Data from February of 2015 for nearly 20,000 home care providers in Washington (representing nearly half of the individual providers and agency providers who will likely be impacted by this contract) provided by SEIU 775 indicate that this provider population is made up of about 32.8% individuals of color and American Indian/Alaska Natives (AI/AN).¹⁸ According to data from the Office of Financial Management, in 2014 the state population was made up of about 29.2% people of color and AI/ANs.¹⁹ These demographic trends are also found in the national literature on home care providers.^{11,13-15} In Washington State people of color and AI/ANs are more likely than their white counterparts to have worse health outcomes;^{1,2,12} therefore improving health outcomes for home care providers can reduce disparities by race/ethnicity.

Data from Washington as well as national data also indicate that home care providers are more likely to earn lower wages or to live in poverty than the average population or other individuals in the workforce.^{14,16,17} Because income has such a large impact on health, as discussed above, low income populations face disparities in many health measures.¹⁻⁷ Improving health outcomes for home care providers therefore also has potential to decrease health disparities by income in Washington.

Other considerations

Individual provider turnover and quality of care

We also explored the connection between wages and benefits and turnover among home care providers, and how turnover impacts quality of care and health outcomes for clients. While we did find evidence for the connection between increased wages and benefits and decreased turnover, we did not identify sufficient studies which have measured the impact of turnover among home care providers on quality of care to include this connection in the logic model on page 3.

We found strong evidence that paying higher wages to home care providers is associated with decreased turnover.^{11,13,15,17,20-23} Research indicates that agencies paying higher wages had higher worker retention than those paying lower rates,¹⁵ and that increasing wages are associated with decreased turnover in longitudinal studies tracking specific cohorts of home care workers.^{20,22} A survey of former home care providers in Washington found that insufficient pay was one of the problems most commonly cited by former home care providers. A lack of pension or retirement benefits was also cited as a problem for these former providers. Twenty-three percent of these providers indicated that the main reason that they left the home care profession was that they wanted better wages and/or benefits. In addition 51% of respondents indicated that higher wages would be the best way to incentivize more workers to enter the home care profession.¹⁷

At least one study found that providers who care for family members may have different motivations or need different incentives than those who care for clients other than a family member.¹³ The Washington surveys found that between 59% and 72% of former and current home care providers cared for a family member or somebody that they knew prior to providing care for them.¹⁷ This indicates that studies conducted with providers who are not caring for family members, or those conducted in other states with a smaller percentage of providers caring for family members, may not be fully generalizable to Washington State.

We identified one study which conducted focus groups with Registered Nurse and Registered Practical Nurses who were working in the home care sector. Focus group participants expressed that continuity of care (having the same provider continually care for a home care client) was linked with trusting therapeutic relationships with clients and higher quality care (e.g. better monitoring of changes in clients' conditions).²³ We also found that staff turnover has been associated with decreased quality of care in the healthcare sector in general,²⁴ however it is not clear how generalizable these studies are to home care workers.

Annotated References

1. **Boysun M, Wasserman C. *Health of Washington State Report: Tobacco*. Washington State Department of Health;2012.**

Washington state Behavioral Risk Factor Surveillance System (BRFSS) data from 2008-2010 indicate that adults with lower incomes are significantly more likely to report smoking cigarettes than their counterparts. AI/AN and black populations also have significantly higher smoking rates than white, Hispanic, and Asian populations.

2. **Centers for Disease Control and Prevention. Behavioral Risk Factor Surveillance System Prevalence and Trends Data: Washington-2012. 2012;**
<http://apps.nccd.cdc.gov/brfss/page.asp?cat=XX&yr=2012&state=WA#XX>. Accessed February 11, 2015.

Behavioral Risk Factor Surveillance System (BRFSS) 2013 data from Washington state show significant correlations between lower income and a number of health indicators including: worse overall self-reported health, depression, asthma, oral health, tobacco use, women's health indicators, health screening rates, physical activity, and limited activity as a result of a disability. BRFSS data from 2011 show that black, AI/AN, and Hispanic respondents are significantly more likely to report fair or poor general health than white or Asian respondents. Participants who identified as multiracial also reported significantly higher rates of asthma than white and Hispanic respondents. These data also show a correlation between higher educational attainment and positive health outcomes for a number of indicators including: oral health, tobacco use, women's health indicators, health screening rates, and physical activity.

3. **Prause J, Dooley D, Huh J. Income volatility and psychological depression. *American Journal of Community Psychology*. 2009;43(1-2):1-2.**

Prause et al. analyzed a sample (n = 4,493) from the National Longitudinal Survey of Youth. Researchers found that income volatility was significantly associated with depression; and downward volatility (frequent losses in income) was significantly associated with depression even after controlling for baseline depression. High income appeared to act as a buffer, so those with lower incomes were more vulnerable to the adverse effects of downward volatility.

4. **Reed P KD, Cheng E, Kinne S. Washington State Department of Health. *Health of Washington State Report: Mortality and Life Expectancy*. 2013.**

The authors present Washington state data on mortality and life expectancy. The data show that age-adjusted death rates were higher in Washington census tracts with higher poverty rates. The state data also show that self-reported health status decreases as income decreases.

5. **Spencer N, Thanh TM, Louise S. Low income/socio-economic status in early childhood and physical health in later childhood/adolescence: A systematic review. *Maternal and Child Health Journal*. 2013;17(3):424-431.**

Spencer et al. conducted a meta-analysis of studies examining the relationship between low socioeconomic status in the first five years of life and physical health outcomes in later childhood and adolescence. Nine studies met the researchers' strict inclusion criteria. The studies indicated significant associations between early childhood low-income status and a number of adverse health outcomes including: activity-limiting illness, parent-reported poor health status,

acute and recurrent infections, increasing body mass index (BMI), dental caries, and higher rates of hospitalization.

6. Subramanyam M, Kawachi I, Berkman L, Subramanian SV. Relative deprivation in income and self-rated health in the United States. *Social Science and Medicine*. 2009;69(3):327-334.

Subramanyam et al. analyzed data from the Current Population Surveys conducted by the United States Census Bureau. Researchers found that individuals from the lowest income category were over five times more likely to report being in poor health than participants from the highest income category. In addition, they found that relative deprivation (the differences in incomes between an individual and others who have higher incomes than that individual [one measure of income inequality]) appeared to explain a large part of this association.

7. VanEenwyk J BG, Bezruchka S, Pobutky, A. Washington State Department of Health. 2013. *Health of Washington State Report: Social and Economic Determinants of Health*. 2013.

VanEenwyk et al. conducted a review of the literature on the complex relationships between the social factors that impact health. The authors found that the literature provides extensive evidence of the association between lower income and poor health outcomes.

8. Arno PS, House JS, Viola D, Schechter C. Social Security and mortality: The role of income support policies and population health in the United States. *Journal of Public Health Policy*. 2011;32(2):234-250.

Arno et al. cite evidence from several studies which have found pension and Social Security benefits to be associated with improved health and decreased mortality among older adults. The authors analyzed mortality rates from 1900 through 1996 using data provided by the Centers for Disease Control and Prevention. They analyzed these mortality rates in comparison to major changes to Social Security benefits—the 1940 introduction of monthly benefits and the 1970 to 1984 growth in Social Security benefits. The authors compared the rates of change in age-specific mortality rates between the age groups under 65 years and those over 65 years to see if these changes were statistically significantly different during and immediately following the years of major change to Social Security benefits. They found that the decline in mortality rate was steady before 1940 for all four age groups, but immediately after 1940 there was a steeper decline in mortality rates for the two age groups over 65 than for the two age groups under 65. This trend remained even after controlling for GDP growth. This trend was observed again between 1970 and 1984 following increases in Social Security benefits. Linear regression analyses show that the 65 years and older groups saw a significantly greater decline in mortality after 1940 compared with the earlier period while the decline in mortality rates for the younger groups remained the same before and after 1940. The authors note that they believe these findings support the hypothesis that Social Security benefits are associated with decreased mortality rates among older adults, but that they cannot say with certainty what impacts other events in the timeline (e.g. the introduction of antibiotics, the growth of Medicare, etc.) had on the mortality of older adults.

9. Herd P, Schoeni RF, House JS. Upstream solutions: Does the Supplemental Security Income program reduce disability in the elderly? *Milbank Quarterly*. 2008;86(1):5-45.

Herd et al. provide a review of the literature on the connection between lower income and poorer health outcomes. The authors analyzed health data among older adults from 1990 to 2000 to determine how health correlated with state changes to monthly maximum Supplemental Security Income (SSI) benefits. The authors used 1990 and 2000 census data from 26 states (including Washington State) and the District of Columbia. They did not limit their analysis to the health of individuals receiving SSI benefits, but rather analyzed how increases in the maximum SSI benefits impacted the health of single individuals aged 65 and older regardless of if they received SSI benefits. Herd et al. controlled for a number of demographic characteristics as well as unemployment trends and changes to Medicaid benefits. The authors found that higher SSI benefit levels led to reductions in disability (measured as health conditions that lasted six or more months and that made it difficult or impossible to go outside alone). They found that a \$100 increase in the maximum monthly SSI benefit led to a 0.46% decline in the probability of having a mobility limiting disability. The authors note that this effect is spread across all single older adults while only about 10% of this population reported receiving SSI benefits, indicating that the effect may actually be larger among those actually receiving these benefits. When they focused the analysis on the population below the 26th income percentile (the population most likely to be receiving SSI benefits), the effect increased fourfold. These findings may not be fully generalizable to retirement benefits, but they do provide insight into the impact of small increases in income during retirement, particularly for lower-income older adults.

10. Norström T, Palme J. Public pension institutions and old-age mortality in a comparative perspective. *International Journal of Social Welfare*. 2010;19(Supplement):S121-S130.

Norström and Palme analyzed 1950-2000 data from 18 Organisation for Economic Cooperation and Development (OECD) countries including the United States. They used mortality data from the World Health Organization Mortality Data Base and from the Human Mortality Database and pension benefit data from the Social Citizenship Indicator Program. The authors also controlled for Gross Domestic Product (GDP) per capita in the analysis. They used old-age excess mortality (the ratio of mortality rate in the group 65 years and above to the mortality rate in the 20-59 year olds) as their outcome. The authors used this measure rather than absolute mortality among older adults as a way to control for potential confounding factors that may have impacted the health of the population as a whole (e.g. changes in healthcare benefits). They found that increases in basic pension benefits (benefits for persons with no or small earnings records) were associated with reduced old-age mortality. The researchers estimated that a 1% increase in basic benefits would reduce old-age mortality by 0.05%. The relationship between income pension benefits (benefits for persons with average incomes) and old-age excess mortality was not significant.

11. Faul A, Schapmire T, D'Ambrosio J, Feaster D, Oak C, Farley A. Promoting sustainability in frontline home care aides: Understanding factors affecting job retention in the home care workforce. *Home Health Care Management and Practice*. 2010;22(6):408-416.

Faul et al. conducted a qualitative, cross-sectional survey with a convenience sample of 116 home care aides contracted by three Area Agencies on Aging in Kentucky. Fifteen cases were removed from the final analysis due to missing data or multivariate outliers. The authors used a survey modeled after the Better Jobs Better Care Survey. The researchers created a hypothetical model of factors that influence turnover among home care aides based on the scientific literature

(i.e. wages, health insurance benefits, demographics, working conditions, training effectiveness, and intrinsic satisfaction). They used the survey data to test the model. The majority of respondents were female (97%), 67% had a high school diploma or less, and 61% were white. The authors added factors to the model in steps to determine if they significantly improved the model's ability to predict the variance in the number of months employed as a home care aide. Age, education, wages, and intrinsic satisfaction were all significant predictors in the final model, and combined they predicted 41% of the variance in months employed. Wages was one of the strongest predictors in the model with increased wages predicting more months of employment. The authors did not indicate if they were able to account for the direction of impact between wages and months of employment.

12. Healthy Youth Survey. QxQ analysis. 2012; <http://www.askhys.net/Analyzer>. Accessed March 2, 2015.

Washington Healthy Youth Survey data from 2012 indicate that Native American youth and youth of color are more likely than their white peers to report several negative health outcomes. For example these data show that 8th, 10th, and 12th grade respondents who identified as American Indian/Alaska Native, Hispanic, or "other" or who reported multiple racial/ethnic categories were significantly more likely than their white peers to report symptoms of depression. Over forty-three percent of AI/AN 10th graders (43.3% [95% CI 37.1- 49.5%]) reported feeling depressed compared to about 29% of white 10th graders (28.5% [95% CI 27.2%-29.8%]). Among 6th graders all other racial/ethnic groups were more likely than white students to report that they had contemplated suicide; however these rates were only significant for students who identified as AI/AN, Hispanic, or "other," or identified with multiple racial/ethnic groups.

13. Matthias R, Benjamin A. Intent to stay among paid home care workers in California. *Home Health Care Services Quarterly*. 2005;24(3):39-57.

Matthias and Benjamin analyzed data from a federally-funded telephone survey conducted in 1996-97 with 618 randomly-selected paid home care workers in California (response rate 62.7%). These workers were employed by agencies or under a consumer-directed model where employees work for relatives or non-relatives. In both cases a publically funded home care program (In-Home Supportive Services) covers the costs of these services. Surveys were conducted in English and Spanish. The majority of respondents were female, non-white, and had a high school education or less. The authors found that a number of factors predicted intent to be working as a caregiver in 12 months: being related to the client, having fewer clients, more training, more job satisfaction, and hopes of receiving a raise. These predictors were not significant when only home care providers caring for a family member were considered. The authors cite evidence that intent to stay and intent to leave are predictors of retention and turnover.

14. Potter S, Churilla A, Smith K. An examination of full-time employment in the direct-care workforce. *The Journal of Applied Gerontology*. 2006;25(5):356-374.

Smith provides demographic information of individuals in the direct-care workforce using the 2003 and 2004 Annual Social and Economic Surveys. Direct-care workers are known under many different titles such as "certified nursing assistants (CNAs), home health aides, chore workers, and personal care attendants." The authors focus on women because the direct care

workforce is mostly made up of women. These national data indicate that direct care workers were significantly more likely than other female workers in the paid workforce to be women of color, to have lower levels of education attainment, to be living in poverty, and more likely to have a child five years or younger and significantly less likely to have U.S. citizenship status.

15. Powers ET, Powers NJ. Causes of caregiver turnover and the potential effectiveness of wage subsidies for solving the long-term care workforce 'crisis'. *B.E. Journal of Economic Analysis & Policy: Contributions to Economic Analysis & Policy*. 2010;10(1).

Powers and Powers collected data from the Community Integrated Living Arrangement (CILA), a Medicaid program in Illinois. They surveyed the Chief Financial Officers (CFO) for all agencies receiving reimbursement from the state that provided state-authorized developmental disability and/or mental health services from July 2003 through June 2004. For large agencies the authors randomly selected five sites operated by the agency. Sixty-one of the 183 agencies responded (response rate ~33%), providing data for 200 sites. The authors did not have access to the specifics of worker turnover (e.g. quits, fires, layoffs, etc.) but agency officials indicated that the vast majority of turnover resulted from new-worker quits. The surveyed CFOs indicated that the caregiving workforce was disproportionately individuals with lower levels of educational attainment, individuals of color, and women. The authors did not have provider data and were therefore not able to control for provider characteristics. Hours and compensation data were pulled from payroll records. The authors found that agencies paying higher total compensation experienced lower turnover rates. Through modeling the authors estimated that an increase of 23.9-30.5 percent in total compensation would reduce turnover by one-third.

16. SEIU 775. Advancing Racial Equity and Protecting Washington's Home Care Program. 2012; <http://seiu775.org/files/2012/09/Homecare-and-communities-of-color.pdf>. Accessed May 26, 2015.

This fact sheet indicates that one in five home care workers in Washington is foreign born. In 2011, 21% of the state's home care workers lived in poverty (less than \$22,350 for a family of four). This level of poverty was 9.1% higher than the state average.

17. Banijamali S, Jacoby D, Hagopian A. Characteristics of home care workers who leave their jobs: A cross-sectional study of job satisfaction and turnover in Washington State. *Home Health Care Services Quarterly*. 2014;33(3):137-158.

Banijamali et al. cite evidence that the turnover rate of individual providers in Washington State has been estimated at 37%. The authors interviewed former home care workers in the state in order to determine what reasons they gave for voluntarily leaving their jobs. The Feldman Group, Inc. conducted telephone interviews (in English) using automatic dialing machines to attempt to contact 31,205 former home care workers who had been members of SEIU 775 and had voluntarily left the profession between August 1, 2007 and October 31, 2010. They completed 402 interviews with home care "leavers." The authors used data from two previous 2010 surveys of currently employed workers conducted by the Feldman Group for SEIU 775 and SEIU Healthcare NW Training Partnership. These three surveys included a total of 1,303 respondents. The authors found that those who had left the profession were more highly educated, had higher household incomes, and were more likely to be white than those who were currently employed in the profession based on recent surveys. Insufficient pay and not receiving enough paid hours while employed as individual providers were the problems most commonly

cited by former home care providers. A lack of pension or retirement benefits was also cited as a problem for these former providers. Twenty-three percent of these providers indicated that the main reason that they left the home care profession was that they wanted better wages and/or benefits. Currently employed leavers were, on average, earning \$4.53 per hour more in their current job than when they were working as individual providers. In addition, a larger percentage of currently employed former home care workers were receiving retirement benefits in their new jobs (21%) compared to when they were working in home care (6%). When asked what wage they would need in order to consider returning to work in home care, 72% of respondents indicated that they would need higher wages than previously received, half of whom indicated that they would need a wage of at least \$15 per hour. Fifty-one percent of respondents indicated that higher wages would be the best way to incentivize more workers to enter the home care profession and 12% indicated that improved benefits would be the best way. The survey of leavers indicates that 59% of respondents cared for a family member or somebody that they knew prior to providing care. The surveys conducted with current home care providers showed that 72% of respondents cared for a family member of somebody that they knew prior to providing care. This study was funded by SEIU 775.

18. SEUI 775. Washington Home Care Providers (unpublished). 2015.

Representatives from SEIU 775 indicated that about 33,000 individual providers and 8,000 agency providers in Washington will be impacted by the 2015-2017 contract. Data from February of 2015 for nearly 20,000 home care providers in Washington provided by SEIU 775 indicate that this provider population is made up of about 32.8% individuals of color and American Indian/Alaska Natives.

19. Washington State Office of Financial Management. Estimates of April 1 Population by Age, Sex, Race and Hispanic Origin. 2014; <http://www.ofm.wa.gov/pop/asr/>.

Data from the Office of Financial Management indicate that in 2014 the state population was made up of about 29.2% people of color and American Indian/Alaska Natives.

20. Baughman RA, Smith KE. Labor mobility of the direct care workforce: Implications for the provision of long-term care. *Health Economics*. 2012;21(12):1402-1415.

Baughman and Smith cite evidence that annual turnover rates among direct care providers ranges from 25% to well over 100%. The researchers analyzed national data collected from direct care workers through the 1996-2000 and 2001-2003 Surveys of Income and Program Participation (SIPP). Survey respondents are surveyed every four months for three years and provide information for the most recent month as well as the preceding three months. The authors used the occupation codes to identify direct care workers (e.g. nursing aides, orderlies). There is no occupation code specifically for home care providers so they are captured by the other occupation codes. Baughman and Smith identified 3,595 spells of direct care work (a spell ends when an employee indicates in the survey that they have switched employers), for 2,711 different direct care workers. The authors found that job spells for direct care employees were short (averaging less than 10 months) and that higher wages were correlated with longer lengths of employment (lower turnover). In order to account for the potential that wages are associated with longer terms of employment because wages increase with longer tenure, they used a number of other variables (e.g. starting wages, Medicaid wage pass-through programs, median wages) that are correlated with wages but not tenure in order to isolate the impact of wages on tenure. These

models showed that higher wages still had a statistically significant, though modest effect, on lengthening job spells. A dollar increase in wage (approximately 11% of the median wages of respondents) was associated with a 2% reduction in the probability of leaving a job in a given month.

21. Dill J, Cagle J. Caregiving in a patient's place of residence: Turnover of direct care workers in home care and hospice agencies. *Journal of Aging and Health*. 2010;22(6):713-733.

Dill and Cagle analyzed the difference in turnover rates for home care and hospice agencies with a focus on direct care workers. The authors analyzed 2003 data collected as part of the Better Jobs Better Care initiative. Managers at home care and hospice organizations in North Carolina completed mailed surveys. The surveys were sent to all 80 hospice agencies in the state and to a sample of 502 home care agencies (sampled proportionally to their prevalence in three regions). One hundred and forty-eight home care agencies (response rate 29%) and 40 hospice agencies (response rate 50%) completed the survey. A number of agencies were excluded from analysis because of missing data or extremely high turnover rates suggesting incorrect data. This led to 93 home care agencies and 29 hospice agencies being included in the analysis. The authors also analyzed linked employee wage and regional characteristics data. The only wage data available was the lowest wage offered to direct care workers by an agency—average wages were unavailable for analysis due to missing values. They found that, at the agency level, wages and health care benefits were not significantly related to turnover. Turnover included both voluntary (quits) and involuntary (e.g. fires, lay-offs) separations. When they analyzed the data by voluntary and involuntary turnover they found that offering health care benefits did lead to a significant reduction in involuntary turnover for an agency.

22. Morris L. Quits and job changes among home care workers in Maine: The role of wages, hours, and benefits. *The Gerontologist*. 2009;49(5):635-650.

Morris conducted a two-wave survey of home care workers in Maine. The author selected 50 agencies (of 122 identified) to provide sample variation in geographic location, agency size, and majority private-pay versus Medicaid clients. Twenty-five of the 50 employers agreed to participate in the survey. Employees of these agencies were surveyed in 2005 and again in 2007. All of the workers in small agencies were contacted while 50-75% subsamples were randomly selected for agencies with over 100 direct care workers. Of the 1,126 contacted workers, 819 participated in the first wave of the survey (73% response rate), and 662 participated in the second wave (59% response rate). The author excluded workers who experienced involuntary job exits. Morris conducted a series of logistic regressions and found that higher wages were associated with lower intent to leave, but that this association did not reach statistical significance. However, wages were significantly associated with lower actual turnover even after controlling for all other job, worker, and labor market factors. Morris estimates that a 20% wage increase (e.g. from \$9.23 to \$11.08) leads to a 7% reduction in intent to leave and a 28% reduction in actual turnover. Morris also outlined the findings from a study conducted by Howes (2005) which tracked the changes to turnover among home care workers from 1997 to 2002 in San Francisco as the wage rate increased due to a living wage ordinance. Howes also found a significant positive association between increasing wages and increased retention.

23. Tourangeau A, Patterson E, Rowe A, et al. Factors influencing home care nurse intention to remain employed. *Journal of Nursing Management*. 2014;22(8):1015-1026.

Tourangeau et al. conducted six focus groups with a convenience sample of Registered Nurses and Registered Practical Nurses who were working in the home care sector in Ontario between August and December of 2011 (n=50). Seven members of the research team independently coded the transcripts (transcribed from audio recordings) and resolved disagreements through discussion. One major theme that arose was that participants expressed continuity of care (have the same provider continually care for a client) was linked with trusting therapeutic relationships with clients and higher quality care (e.g. better monitoring of changes in clients' conditions). Participants also expressed that their intent to remain employed as home care providers was influenced by the perceived disparity in wages between home care and other health care providers as well as a lack of benefits such as paid vacation, sick leave, and pension. This study was specific to home care nurses in Ontario, so may not be fully generalizable to home care providers covered by the Individual Provider Home Care Contract.

24. Buchan J. Reviewing the benefits of health workforce stability. *Human Resources for Health*. 2010;8(1):1-5.

Buchan examines the relationship between workforce stability among healthcare workers and quality of care. The paper outlines past research which has found relationships between turnover in the healthcare workforce and higher risk-adjusted mortality scores, higher severity-adjusted length-of-stay, patient care, efficiency, and productivity.