

Wages, Health Benefits, and Retention of Direct Care Workers in Long Term Care: A Life Table Approach

Long term care refers to assistance provided over a prolonged period of time to individuals with chronic illness, disability, or cognitive disorder. An increase in the aging population with baby boomers entering the older ages, accompanied by an increase in life expectancy linked to medical advancements has led to increase in the demand for long term care. The increase in demand for these services is compounded by less availability of informal care due to changing family structure, with fewer children in households and more women going to work. In absence of informal care, there is high demand for these services through formal caregivers called direct care worker (DCWs).

Reports show that the number of DCWs currently employed in the industry is not sufficient to meet the growing requirement for these services and that there will be a need to add large numbers of new workers to the workforce in near future. This high demand for DCWs is compounded by problems with both recruitment and retention of workers employed by providers delivering long term care. The average annual turnover rates for these workers are reported to be high (up to a 100%). The scarcity of DCWs not only causes problems with managing demand for care, but also leads to decreased quality of care and increased cost. Various factors, including low wages and restricted employer-sponsored health benefits have been cited as the reasons for high turnover of this workforce.

Hence, in studying the turnover behavior of direct care workers and what initiatives are effective in improving their recruitment and retention, it is necessary to understand how wage and health benefit changes impact the turnover pattern of these workers. The study addresses two research questions – first, 'How do the probabilities of wage enhancement, health

insurance benefit offers, or separation from the employer vary at different lengths of employment for a direct care worker?’ and second, ‘Does enhancement of wages and/or provision of health benefits at specific lengths of employment modify the turnover pattern of direct care workers?’. Utilizing a large sample of direct care workers with continuous wage, benefit, and separation transitions, multi-state period life tables are constructed to first study the pattern of changes in wage and health benefit during the employment tenure of a DCW and then compare expected remaining tenure for workers with and without wage or health benefit improvisation at various lengths of employment.

In this research, the events of interest are wage increase, health benefit offer, and turnover for a DCW during their employment. Life table method of studying survival function is utilized to analyze these events as a function of time. In addressing the first question, we use multi-state period life tables to study the employment pattern of workers as they progress through their tenure. The second research question involves construction of two separate multi-state period life tables to develop turnover pattern for workers who did get wage increase and workers who did not. The expected remaining tenures for each length of employment are then compared between two life tables using t-test. Similar analysis is conducted using the health insurance benefit information.

The data for the study was collected as part of a nationwide demonstration project – better jobs better care (BJBC) - implemented between 2004 and 2006 by 128 long term care provider organizations, with the aim to improve retention and recruitment of direct care workers. The employers participating in the project submitted individual-level data for each direct care worker employed with the organization over the duration of the demonstration. Information was collected on hire date for each worker, along with their current wage, work

status (full time, part time, on-call, or agency), and health benefit status. In case the worker has a change in wage or health benefit status, this information is updated in the records along with date of status/wage change. Finally, if the worker terminates employment, the employment record for the worker is updated to include the date of separation and reason for termination. Benefitting from this unique data, this study will conduct analyses using life table techniques to answer the above-mentioned research questions.

Analysis to date was conducted on a total of 12,314 workers of which 6,190 are right censored. Period life table on separation pattern of workers was constructed by length of employment. The findings show that the workers have the highest probability of separation in the first three months of employment. The workers with 0-3 month employment duration have an expected remaining tenure of 3-1/4 years compared to around 4-1/2 years for 3-6 month old employees. The expected residual tenure for workers with 6-12 months length of employment is approximately 6-1/2 years and for employees between one and five years of employment is 11 years.

The findings of this research will show how wage increases and health benefit offers at specific lengths of employment to direct care workers in long term care can reduce turnover among workers. The study also provides a framework to using multi-state life tables in evaluating the effectiveness of wage enhancement and health benefit provision to develop job retention measures based on the tenure of workers. The methods employed in this research to study the case of health care worker turnover can be applied to assess turnover behavior of employees in other industries.