Maintaining Long Term Care:

Washington demographic and economic trends threaten access and quality*

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By 2030, one in five Americans will be a senior citizen. Perhaps the greatest demographic shift of our time, the aging of the baby boom will have far-reaching consequences for services for the elderly.

The system of long term care in Washington will be sorely tested by this population surge. At the same time, the state's economic prosperity and long term income outlook will make it hard to recruit and retain care workers at current wage levels. This dual challenge for long term care will make it difficult to maintain access and quality without significant investments into the system.

The experience of other nations – particularly nationalization of long term care in Germany (1994) and Japan (2000) – underlies the need for careful planning to avoid drastic measures in the future.

The Evans School of Public Affairs

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For two decades, long term care – a range of services for patients with functional limitations or chronic health conditions – has strained alike the resources of families and government assistance programs.

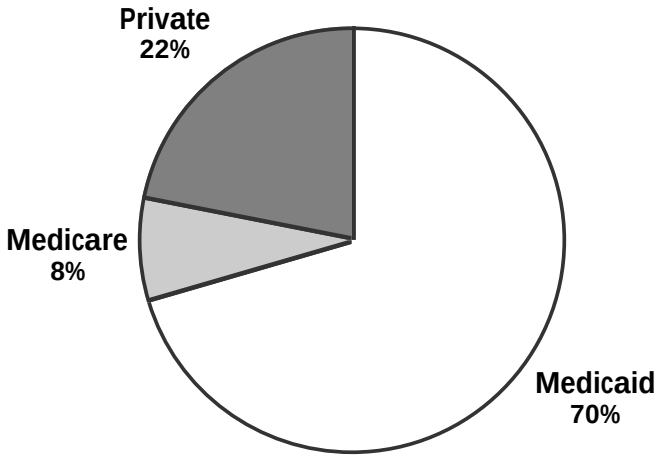
Caring for the elderly and functionally disabled, long term care is also provided to younger persons with various physical, cognitive, and behavioral limitations. Alzheimer's and Multiple Sclerosis patients are prime users of long term care services, as are the mentally retarded and developmentally disabled populations. Part of the effort to increase the independence and productivity of the disabled has come through community based long term care services. While the elderly constitute the vast majority of the long term care population, within the disabled population, 25-46% are below the age of 65. As of 1999, 37% of those on long term care were age 64 or under.

Spanning the spectrum of needs through sub-acute care, personal assistance, habitation, rehabilitative, medical, skilled nursing and supportive social services, care is delivered through an equally broad range of settings, including nursing homes, assisted living facilities, respite care, adult day care, and home and community based care.

It should be noted that most older adults are free of disability and have no need for long term care. The Urban Institute has estimated that approximately one-fifth of the elderly do require some form of assistance, but the extent of this need is not necessarily constant.

While only 5 percent of the population over age 65 live in nursing homes or similar institutions,

Long Term Care in Washington
Patients by means of payment, 2000



Sources: Caseload Forecast Council (Medicaid) and imputed from HCFA/CMS (Medicare) and 2000 Census SF-1 (Private).

Several factors are driving increased demand for long term care, particularly rising life expectancies and increased work by women outside of the home

an analysis of 1994 data predicted that between 35 and 49 percent will eventually spend some time in a nursing home. The length of stay varies substantially, but stays of less than a year, particularly to recover from major illnesses, are common, although the average stay is two and a half years. Unfortunately, part of the explanation is also mortality. Other forms of long term care tend to be of a more uniform (and longer) duration.

Several factors have increased the demand for long term care. Rising life expectancies and ongoing improvements in medicine are enabling almost every definable population to live longer than ever before. Generational changes in the structure of the economy have undermined the ability of families to care for themselves. The primary caregivers in most families are women, who have seen a dramatic shift to working outside the home in the last half-century. Moreover, the geographical dispersion of families in response to employment and educational opportunities has lessened generational proximity of families. More broadly, a general rise in working hours, the number of jobs, and a 25-year decline in long term unemployment has reduced the ability of families to respond to the needs of the elderly and disabled even when distance and other responsibilities do not preclude help.

System Stability

For two decades, long term care has witnessed stable funding and demand. Two decades of relative prosperity have not come without economic displacement, but significant public investments have maintained long term care for the needy. Increased life expectancies have fueled caseload growth, but the inherent population distribution – low birthrates during the depression and second world war followed by a postwar baby boom – have left the nation with a smaller contingent of elderly relative to the population as a whole.

Since at least the 1980s, public agencies have attempted to contain rising costs fueled by medical cost inflation and labor costs generally, and the costs of nursing home care in particular. Cost growth slowed in the mid-1990s, mirroring health care overall, and has likewise accelerated in the last year. Efforts to move to managed care in Medicare and a slew of state cost containment initiatives have yielded savings, but appear to have more modest ramifications in the long run.

Indeed, the most effective changes have been to merely reduce eligibility and service coverage and to cut provider reimbursement rates, an approach which obviously falls short of maintaining long term care access. Shifts in the mix of care delivery, particularly away from nursing homes toward home and community care, appears to be one of the few ongoing structural changes likely to control costs without diminishing access or quality.

Demographics and the Elderly

In exactly a decade, the first wave of baby boomers, born in 1946, will reach the age of 65. Improvements in medical technology, nutrition, and the public health infrastructure have

the population of Washington
residents aged **65-69 years**
will **double** over the next 13 years.

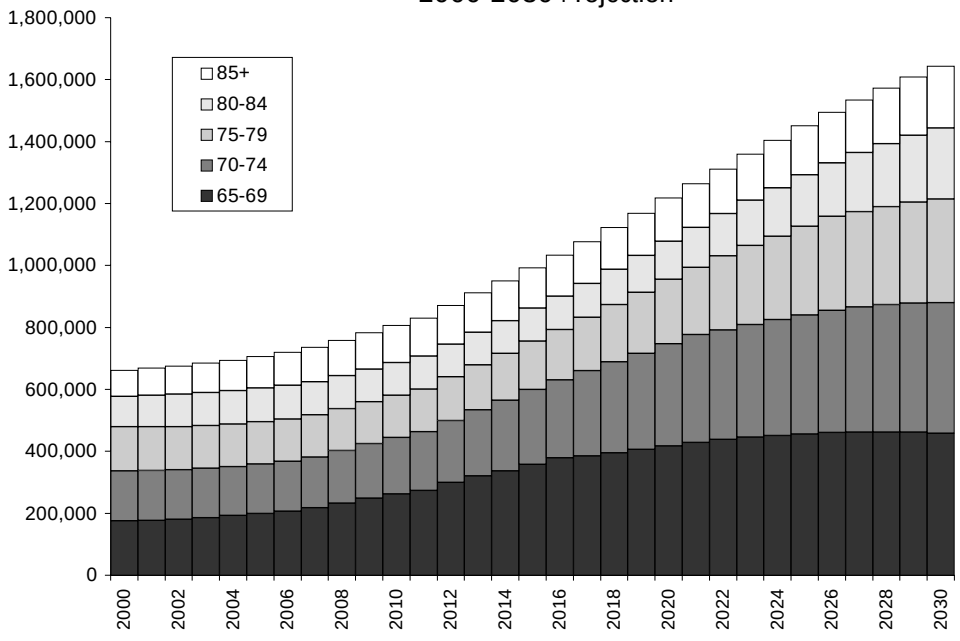
afforded this generation an unparalleled level of health which should continue into retirement. The sheer size of this population, however, makes even the healthiest generation in history almost certain to overwhelm the long term care system. American life expectancy could also rise further, from 21st in the world at 76, to a level closer to the roughly 80 year life expectancy in Japan, Canada, and most of Europe.

Life expectancy has climbed significantly in the past century. Census Bureau analyses show that in 1900, the average life expectancy across the planet was less than 30 years. By 1950 it had climbed to 46. By the late 1990s it was 66. By 2030, projections indicate it will be 75. A large part of the increase has been attributable to safer childbirth for babies and mothers and declining fertility rates, lowering the incidence of infant deaths, which tends to drag down the average life expectancy in a population. Simple public health measures such as cleaner water, sanitation, antibiotics and basic immunizations account for much of the rest, eradicating widespread killers such as diphtheria and polio in the developed world and holding them in check elsewhere. Only in recent times has modern medicine significantly lengthened the years people can expect to live once they reach middle age.

At the beginning of this century, men outlived women. As a result of better childbirth methods, women have caught up, adding more than 30 years to their life expectancy during the 20th century. Higher rates of smoking and

Washington Residents over 65

2000-2030 Projection



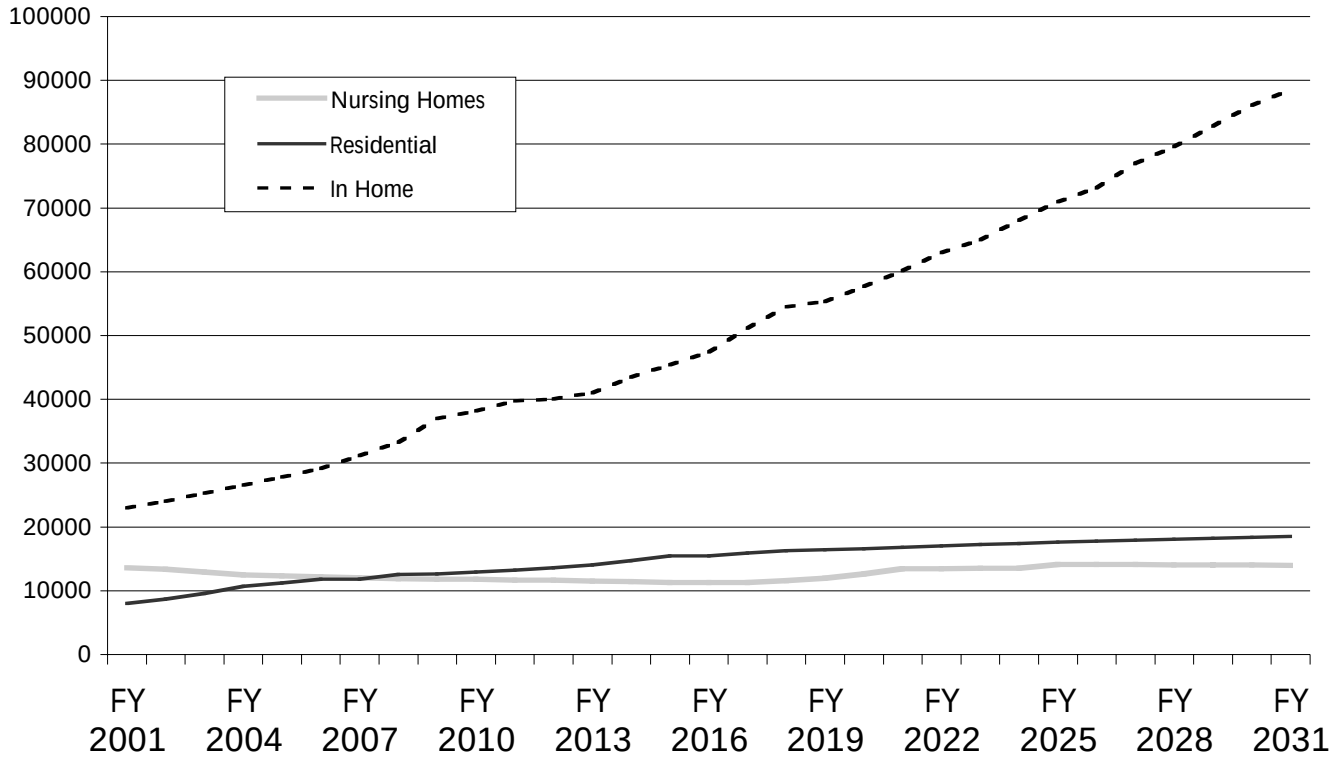
Source: Washington Office of Financial Management

Projecting Long Term Care Caseload Growth

Varied forms of long term care reflect varied consumer preferences. Younger senior citizens prefer home care, for example, while demand for long term care varies across socioeconomic groups. Based on 2000 Census data for Washington, this projection estimate the future caseload mix of Washington senior citizens given current preferences. Note that this is for Medicaid funded long term care only, and is only adjusted for non-Medicaid long term care with respect to the estimated flow of Medicare nursing home patients to Medicaid.

Long Term Care Caseload Composition

Medicaid Funded, 2001-2031



Source: Evans School projection.

Publicly Funded Long Term Care and Related Expenditures

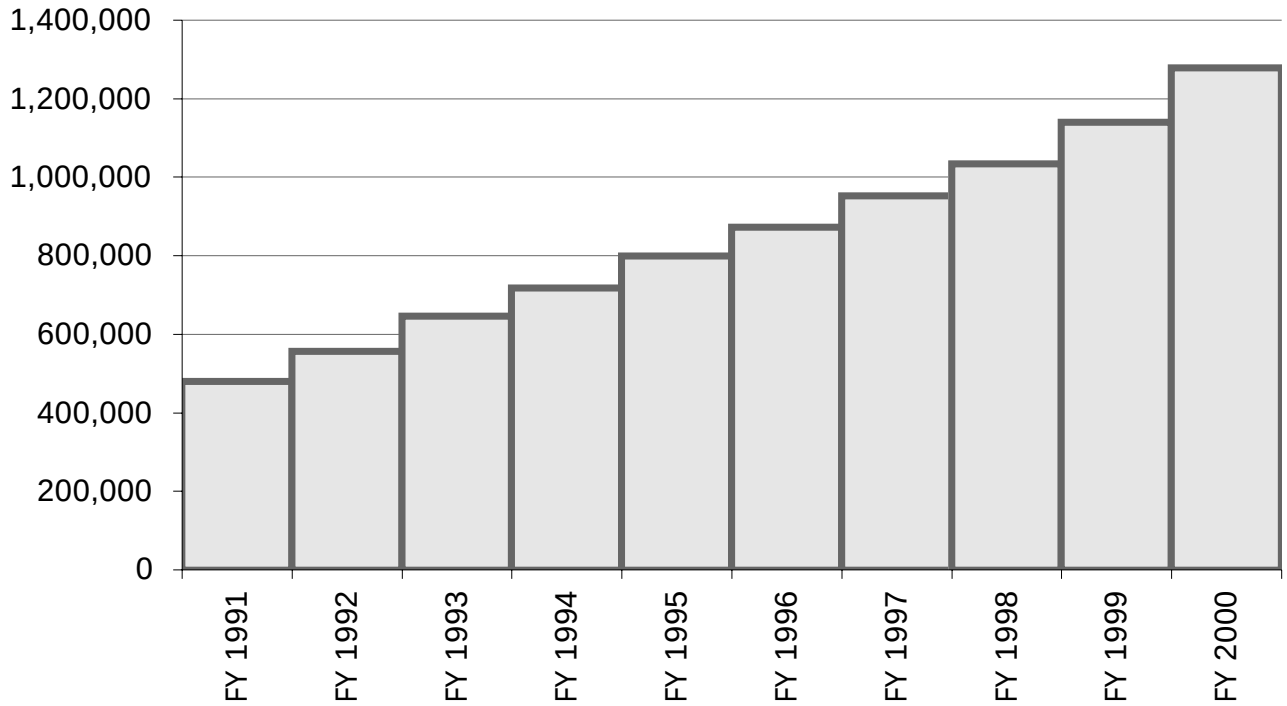
Medicaid Spending in Washington State, Fiscal Year 2000

	Federal Share	State Share	Total
Nursing Facility Services	318,122,085	295,673,572	613,795,657
Home Health Services	5,987,777	5,529,226	11,517,003
Home and Community	250,746,521	232,969,412	483,715,933
Personal Care Services	62,145,613	57,757,170	119,902,783
Targeted Case Management	21,751,022	20,279,203	42,030,225
Primary Care Case Management	18,556	17,245	35,801
Hospice Benefits	3,124,381	2,903,751	6,028,132
Total	661,895,955	615,129,579	1,277,025,534
Total Medicaid Spending	6,205,685,110	5,715,411,135	11,921,096,245

Source: HCFA/CMS form 64 and 2082.

Medicaid Long Term Care Expenditures

Total Spending, 1991-2000, Thousands of Dollars



Source: HCFA/CMS form 64 and 2082.

occupational hazards among men created a gap in the opposite direction. Demographers theorize, and 2000 Census data have confirmed, that this gender gap – women living on average six years longer than men – is closing.

Breakthroughs in the treatment of heart disease, particularly in men, is leading to the convergence in life expectancies. At the same time, the incidence of lung cancer in females is rising faster than in males, probably because of increased smoking among women starting in the 1950s and 1960s.

Improving life expectancy among U.S. males is also driving the nation's overall life expectancy gains. Life expectancy of a 65-year-old male in 1995 was 15.5 years, but it promises to climb to 20 years by 2030, according to median Census Bureau projections. The bureau's rosiest calculations indicate that the life expectancy of some of the later boomers could hit 25 years by the time they reach 65.

Several other factors will produce slightly different population trends in Washington. Migration has been an important driver of state population – a slight out flow of elderly residents has been offset by a much larger influx of younger workers.

After weathering short term economic fluctuations, migration into the state will resume, but shifts in the elderly population appear to be shifting directions, coming into the state instead of leaving. The effect is small for the state as a whole, but fairly substantial within the elderly population, accounting for 2.3% of the total population over 85 by the year 2030.

Private, Federal, and State Financing

The financing of long term care is as complex as medicine itself; an interlocking weave of public, private, and for-profit actors. The two largest groups of health care funders – Medicare and employer provided private insurance – cover little or no long term care expenses.

Although Medicare coverage rules have been liberalized since 1989, Medicare still basically covers only short-term nursing home and home health care after a serious illness, accident, or surgical procedure (altogether accounting for 7 percent of long term care expenditures). Full Medicare coverage is only available to fully fund the first three weeks of nursing home stays. Private long term care insurance nationally pays for only 3 percent of nursing home care costs.

As a consequence, most families must purchase or provide long term care themselves. The cost of care often quickly consumes lifetime family assets. The sole ongoing source of long term care support, Medicaid, will cover costs only after a person "spends down" his or her assets to reach the poverty-derived threshold required to qualify for assistance. Medicaid assistance supports two out of three nursing home residents nationally, and roughly 70 percent in Washington.

Overall, almost 80 percent of Medicaid long term care expenditures for the elderly went toward institutional (essentially nursing home) care in 1998; another 13 percent toward home care services, with the remainder supporting elderly and non-elderly disabled services. The Kaiser

While **all components of long term care will grow** over the next 30 years, the **bulk of the increase** will occur in **home care.**

Family Foundation estimates that older adults and their families spend about $1.20 on long term care for every Medicaid dollar.

While originally intended to provide health coverage to low income families, Medicaid has by default evolved as a primary provider of long term care assistance. In the absence of a comprehensive long term care financing policy, and high associated costs, a majority of nursing home residents have spent down their assets to become Medicaid eligible within a year of admission into a nursing home.

Younger people with disabilities are similarly affected, with the more immediate concern of being unable to acquire any asset that would disrupt Medicaid eligibility yet does not constitute a stream of income (such as an inherited home).

Long Term Care in Washington

As a roughly equal partner in Medicaid, Washington provides 48 percent of the cost and administers Medicaid long term care and related programs. The state classifies long term care into three categories: Nursing Home, Residential, and In Home Care, in approximate order of the extent and cost of care.

Nursing homes provide 24-hour supervision along with a range of other services and therapy. The cost of such care is expensive – typically between $40,000 and $65,000 annually but approaching $90,000 in some cases – technically, nursing home stays are considered hospitalization. There are roughly 13,500 Medicaid funded nursing home residents in Washington state.

Residential care includes adult family homes and boarding homes: programs outside of the home that are less intensive than nursing homes. Adult family homes provide more supervision with a maximum resident-provider ratio of 6 to 1, intended to accommodate patients suffering from diseases such as Alzheimer's. There are roughly 8,000 Medicaid funded adult family and boarding home residents in Washington state.

In home services or home care is provided to allow the elderly to live in their own homes. Programs range from adult day care provided in groups outside of the home, to personal and home health care provided directly in the home. This is the largest and fastest growing segment of long term care. There are roughly 23,000 Medicaid funded home care recipients in Washington state.

Disabled and Special Populations

The long term services and supports needed by children and adults with disabilities range widely from personal assistance services, rehabilitation, supported living services, to nursing care services. There has been movement toward community services, based on functional need, which includes assistance or training in daily tasks and health-related functions.

At the federal level, Medicaid is designed to provide services through 24-hour nursing or intermediate care facilities rather than in an individual's own home. While many states have developed home and community based services for certain segments of their populations, the systems often fail to meet the full extent of need

Dependency Ratio

Another way to look at the demographic change is the **dependency ratio.** over the next 30 years, Washington will the **bulk of the increase** will occur in **home care.**

in the state (such as for people with mental retardation or related developmental disabilities) or they fail to address whole groups of people (such as people with physical disabilities who do not have mental retardation).

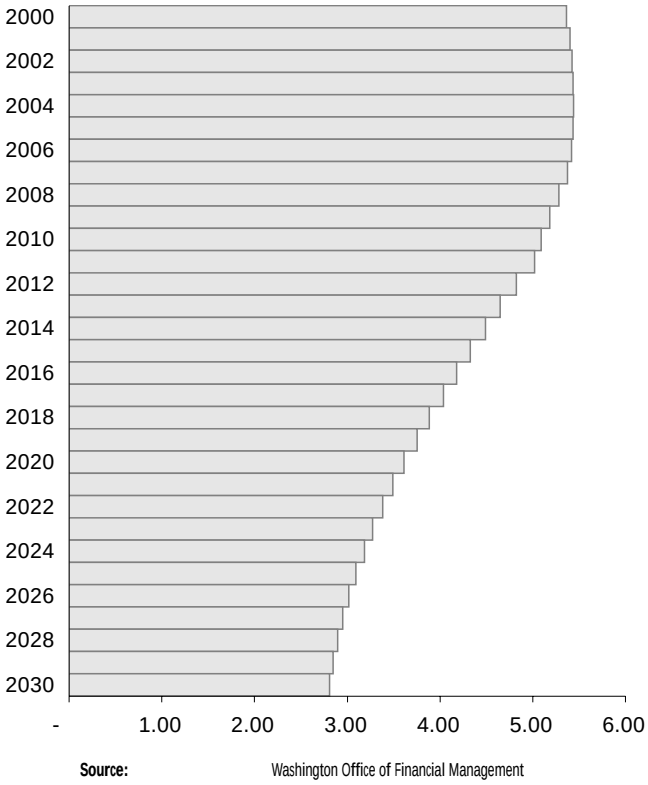
The lack of appropriate home and community support services prompted the Supreme Court's decision in *Olmstead v. L.C.* (1999) to require states to provide integrated treatment as an alternative to institutionalization. Washington state is thus required to address the concern that many people with disabilities in the Medicaid system feel trapped in institutions and nursing homes while many others feel equally trapped in poverty.

Families with children with disabilities and adults with disabilities are unlikely to find their long term support needs met by private insurance. For those insured people recently disabled, private insurance caps are soon met. For those people who are already disabled, private long term care insurance is not an option available to them.

It also makes sense to examine the Medicaid medical, mental health and long term care programs for vulnerable clients. As one state official noted: "When any of these three service sectors underperform, they radiate risk and cost to the other two". The absence of holistic client assessment and integrated care plans likely will undermine efforts in any single sector to control costs.

Dependency Ratio

Ages 20-64 to ≥65, Washington State, 2000-2030



Source: Washington Office of Financial Management

Implications of Dependency Ratio

Another way of illustrating Washington's projected demographic change is through the dependency ratio – the number of residents, aged 20-64, for every person of retirement age, aged 65 or older. Not everyone between the ages of 20 and 64 works or can provide care, and large numbers work in some capacity beyond the age of 65. Nonetheless, this figure provides a rough approximation of the number of workers who will be supporting each retiree– dropping from 5.4 to less than 3 over the next 30 years.

Personal and Home Care Aide Wage Data

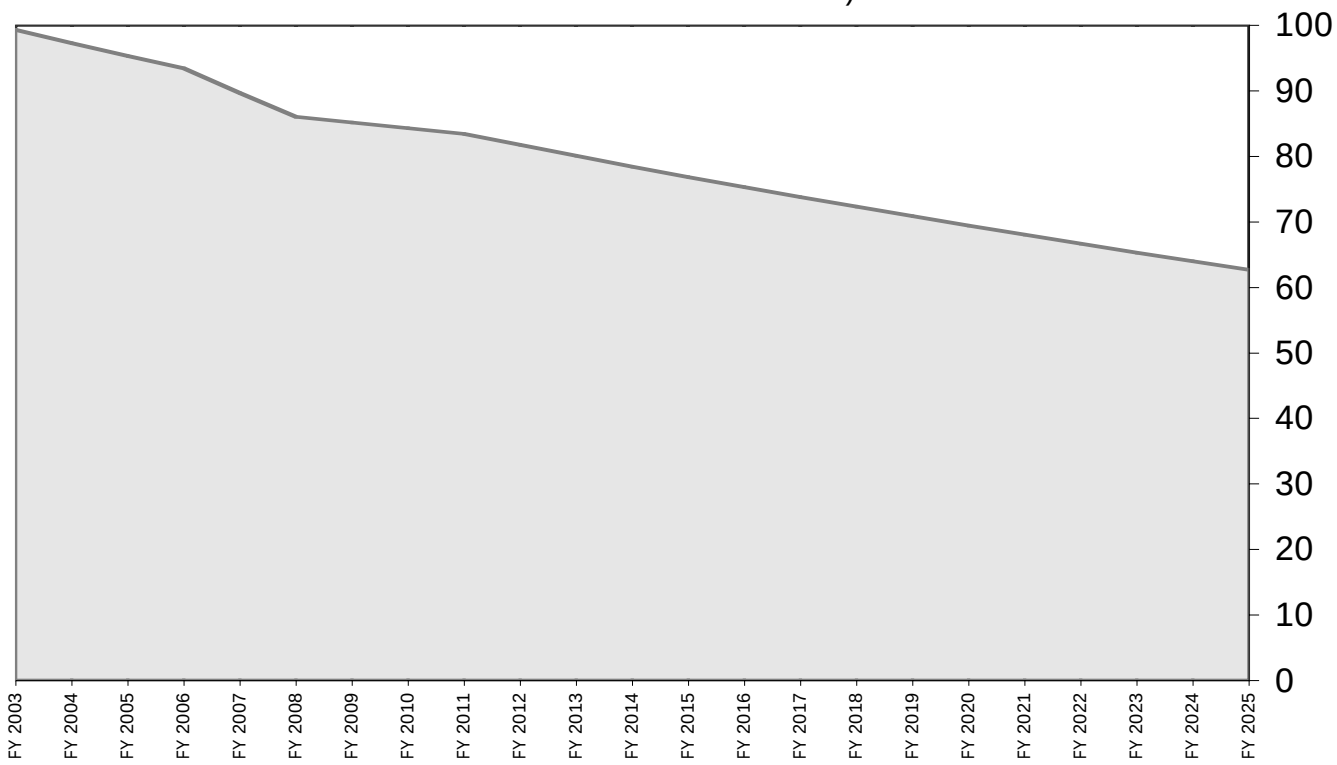
Washington State 2001 Occupational Employment Statistics

Average	1st Quartile	Median	Third Quartile	Annual Salary
$7.75	$6.66	$7.61	$8.64	$15,830

Source: Washington Employment Security agency.

Projected Home Care Wage Gap

Change in Real Per Capita Income and State Funding (Projected Fiscal Growth Factor and Caseload Increases) 2001=100



Sources: OFM Personal Income Projection;
Evans School Fiscal Growth Factor projection;
Evans School home care caseload projection.

Quality of non-family provided **home care**
is particularly sensitive to **funding levels.**

Implications for Quality

Aside from the inherent logistical problem of increased caseloads, Washington faces significant problems in maintaining quality. Research suggests that quality issues raised by inadequate funding will be most severe within home care. While still of concern in other facets of long term care, nursing homes and care in more institutional settings appear to be better equipped to deal with such shortfalls.

Research by Dana Mukamel and William Spector at the University of Rochester examined the implications of funding levels on long term care quality in nursing homes in New York. Using quality measures that were defined by the deviation of the facility's outcome rate from its predicted quality, and adjusted for better funding, both in compensation of care providers, and of enforcement, the Rochester research has found that infrastructure and procedures in nursing facilities can serve to maintain care.

Robert Applebaum of Miami University has likewise concluded that non-family home care providers are sensitive to compensation level changes by virtually all quality measures, in contrast to Mukamel and Spector findings concerning nursing homes.

Caregivers and Labor Market Trends

Independent home care providers currently earn $7.18 per hour. As the system stretches to accommodate increased caseloads in the coming years, the state will be hard pressed to increase worker compensation. Based on projected caseload growth, and assuming increased spending equal to the Initiative 601 fiscal growth factor, the compensation outlook is poor. Relative to projected personal income growth, home care compensation will drop by 37.3 percent by 2031. Compliance with the state's minimum wage, which automatically increases with inflation, will result in higher home care wages than projected, but will also require the commitment of additional funding.

In any workforce, there is a relationship in recruitment and retention between worker qualifications and compensation. Home care has been insulated from this economic reality in part because of the large number of family members

Applebaum, Robert, P. Mayberry: "Long-term care case management: a look at alternative models." *The Gerontologist* October 1996.

Applebaum, Robert, P. Phillips: "Assuring the quality of in-home care: the "other" challenge for long-term care." *The Gerontologist* August 1990.

Applebaum, Robert, R. Hornbostel, D. Challis: "Assessing outcomes of home care services." *The Gerontologist* October 15, 2000.

Applebaum, Robert: "Adult Day Care: Findings from a National Survey." *Contemporary Sociology* May 1991.

Applebaum, Robert: "Long-Term Care: Where Have You Gone?" *The Gerontologist* October 15, 2000.

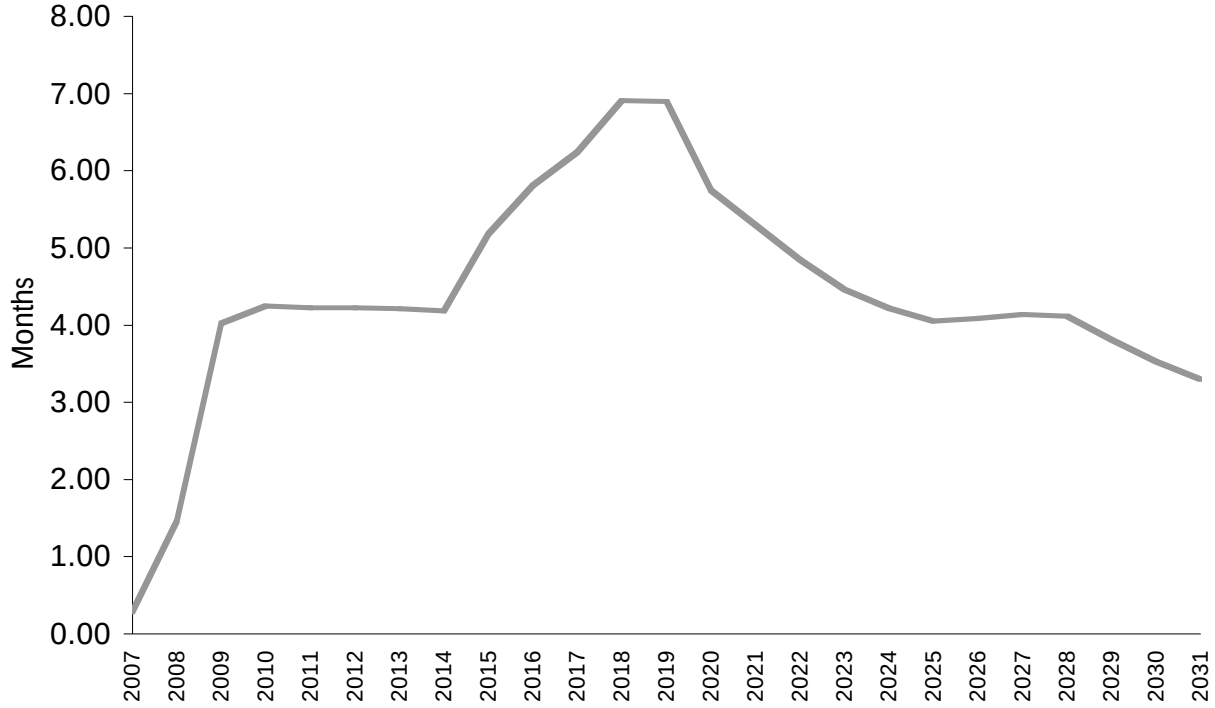
Mukamel, Dana, C. Brower: "The influence of risk adjustment methods on conclusions about quality of care in nursing homes based on outcome measures." *The Gerontologist* December 1998.

Spector, William, J. Reschovsky, J. Cohen: "Appropriate placement of nursing-home residents in lower levels of care. *The Milbank Quarterly* Spring 1996.

Warshaw, Gregg, S. Mehdizadeh, R. Applebaum: "Infections in Nursing Homes: Assessing Quality of Care." *The Journals of Gerontology, Series A* February 2001.

Delays in home care placement are certain to increase under present practices.

Additional Home Care Placement Delay
Washington State, 2007-2031



Source: Evans School projection.

that provide home care. Increased distances between family members, higher divorce rates, and greater participation in the work force have already created a greater need for non-family workers. The baby boom generation's demographics will further these trends and can be expected to exacerbate the need for qualified care givers.

Roughly 32,000 in Washington are currently employed in nursing and personal care. This number is projected to rise in the coming years, reflecting heightened demand for workers in long term care. It is unclear, however, whether the supply of workers will exist to fill these positions.

Indeed, comparing the expected wage level of these positions to the number of workers entering the workforce, a gap emerges starting in 2007 where the needs in home care will slightly outstrip the supply of workers willing to accept low wages. With anecdotal reports of home care placement delays already running a few weeks longer for those who rely on DSHS to find a care provider, delays in home care placement are certain to increase under present practices.

2001-2031 LTC (Medicaid) Caseload Forecast

Daniel J. Evans School for Public Affairs, University of Washington

				HCS Detail	
	All	Total HCS	Nursing Homes	Residential	In Home
FY 2001	44,460	30,919	13,542	7,996	22,923
FY 2002	45,981	32,665	13,316	8,644	24,021
FY 2003	47,728	34,830	12,898	9,569	25,261
FY 2004	49,656	37,206	12,450	10,689	26,517
FY 2005	51,314	38,983	12,331	11,178	27,805
FY 2006	53,077	40,914	12,163	11,764	29,150
FY 2007	54,902	42,884	12,018	11,766	31,118
FY 2008	57,549	45,737	11,812	12,493	33,244
FY 2009	61,339	49,555	11,784	12,629	36,926
FY 2010	62,820	51,026	11,794	12,896	38,131
FY 2011	64,601	52,942	11,659	13,198	39,744
FY 2012	65,151	53,546	11,605	13,538	40,008
FY 2013	66,458	54,981	11,477	13,981	41,000
FY 2014	69,536	58,117	11,419	14,645	43,472
FY 2015	72,126	60,845	11,281	15,447	45,398
FY 2016	74,095	62,842	11,253	15,454	47,388
FY 2017	78,235	66,999	11,236	15,884	51,115
FY 2018	82,270	70,714	11,556	16,214	54,500
FY 2019	83,617	71,681	11,936	16,364	55,317
FY 2020	86,757	74,181	12,576	16,523	57,658
FY 2021	90,248	76,832	13,416	16,733	60,099
FY 2022	93,369	79,925	13,444	16,960	62,965
FY 2023	95,704	82,233	13,471	17,224	65,009
FY 2024	98,934	85,431	13,502	17,376	68,055
FY 2025	102,604	88,500	14,104	17,565	70,935
FY 2026	104,901	90,822	14,079	17,712	73,110
FY 2027	108,914	94,857	14,057	17,858	76,999
FY 2028	111,640	97,607	14,033	18,006	79,601
FY 2029	114,926	100,941	13,985	18,152	82,789
FY 2030	118,395	104,398	13,997	18,297	86,101
FY 2031	120,879	106,940	13,939	18,444	88,496

2001-2031 LTC (Medicaid) Caseload Forecast

Daniel J. Evans School for Public Affairs, University of Washington

				HCS Detail	
Δ	All	Total HCS	Nursing Homes	Residential	In Home
FY 2002	3.42%	5.65%	-1.66%	8.11%	4.79%
FY 2003	3.80%	6.63%	-3.14%	10.70%	5.16%
FY 2004	4.04%	6.82%	-3.47%	11.70%	4.97%
FY 2005	3.34%	4.78%	-0.96%	4.57%	4.86%
FY 2006	3.44%	4.95%	-1.36%	5.24%	4.84%
FY 2007	3.44%	4.82%	-1.19%	0.02%	6.75%
FY 2008	4.82%	6.65%	-1.71%	6.17%	6.83%
FY 2009	6.59%	8.35%	-0.24%	1.09%	11.08%
FY 2010	2.42%	2.97%	0.08%	2.11%	3.26%
FY 2011	2.83%	3.75%	-1.14%	2.34%	4.23%
FY 2012	0.85%	1.14%	-0.46%	2.58%	0.66%
FY 2013	2.01%	2.68%	-1.10%	3.27%	2.48%
FY 2014	4.63%	5.70%	-0.51%	4.75%	6.03%
FY 2015	3.73%	4.69%	-1.21%	5.48%	4.43%
FY 2016	2.73%	3.28%	-0.25%	0.04%	4.38%
FY 2017	5.59%	6.62%	-0.15%	2.79%	7.86%
FY 2018	5.16%	5.54%	2.85%	2.08%	6.62%
FY 2019	1.64%	1.37%	3.29%	0.92%	1.50%
FY 2020	3.76%	3.49%	5.36%	0.97%	4.23%
FY 2021	4.02%	3.57%	6.68%	1.27%	4.23%
FY 2022	3.46%	4.03%	0.21%	1.36%	4.77%
FY 2023	2.50%	2.89%	0.20%	1.56%	3.25%
FY 2024	3.37%	3.89%	0.23%	0.88%	4.69%
FY 2025	3.71%	3.59%	4.46%	1.09%	4.23%
FY 2026	2.24%	2.62%	-0.18%	0.83%	3.07%
FY 2027	3.83%	4.44%	-0.16%	0.83%	5.32%
FY 2028	2.50%	2.90%	-0.17%	0.83%	3.38%
FY 2029	2.94%	3.42%	-0.34%	0.81%	4.00%
FY 2030	3.02%	3.42%	0.09%	0.80%	4.00%
FY 2031	2.10%	2.44%	-0.41%	0.81%	2.78%