Caring for America's aging population: a profile of the direct-care workforce

Direct-care workers constitute a low-wage, high-turnover workforce with low levels of health insurance; taking these characteristics into account guides the challenge of how to deal with the growing demand for long-term care by an aging U.S. population

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etween 1970 and 2004, the labor force participation of American women rose from 43.3 percent to 59.2 percent,¹ and one of the consequences was the development of a category of workers paid to provide care for children and the elderly who had previously been cared for in the home. Over the same period, the life expectancy of men grew by 8.1 years and the life expectancy of women rose by 5.7 years,² trends that increased the demand for both medical and personal care for the elderly. In 1999, 16 percent of Americans over the age of 65 required some form of long-term care, and the majority received that care in home- or community-based settings rather than in nursing homes.³

Today, direct-care workers provide the majority of paid hands-on care, supervision, and emotional support to the elderly and disabled in the United States. These paraprofessional workers hold a variety of job titles, including personal care assistant, home care aide, home health aide, and certified nursing assistant. They work in diverse settings, such as private homes, adult day centers, assisted-living residences, hospitals, and nursing homes. Depending upon their job title and the setting, a direct-care worker's tasks may include providing medical oversight, administering medications, and measuring vital signs; assisting with personal care activities, such as bathing, dressing, toileting, and eating;

providing comfort and companionship; and shopping, preparing meals, and cleaning the house.⁴

As the baby-boom cohort nears retirement age, the question of how to provide necessary health care and personal services to a growing elderly population has become a concern in the United States and other industrialized nations. This article uses the 2006 Annual Social and Economic Supplement to the Current Population Survey (CPS), together with linked data from the 2005 CPS and 2006 CPS, to provide an economic and demographic profile of the current U.S. direct-care workforce.⁵ The resulting portrait is one of a low-wage workforce with correspondingly low levels of health insurance coverage and high levels of turnover. The final section of the article discusses the potential implications of low pay and high turnover for the provision of long-term care to America's elderly population in the future.

Demographic profile

In 2006, 2.7 million workers 19 years or older were employed in direct-care occupations, constituting 2 percent of the American workforce. The majority of direct-care workers are employed in long-term care settings rather than hospitals, and the largest occupational group is home health aides, who make up 42 percent of the direct-care workforce. Another 41 percent of this workforce consists of nursing home aides, and the remaining 17 percent are employed as aides in hospitals. Because direct care is such an overwhelmingly female occupation (89 percent of such workers are women), the analyses that follow look only at female direct-care workers, comparing them with the overall female workforce. In addition, three specific occupational subgroups of the direct-care workforce—hospital aides, nursing home aides, and home health aides—are compared with each other and with the overall female workforce. All of the comparisons made are statistically significant at the 90percent level.

As shown in table 1, 49 percent of female direct-care workers are minorities, and black women (29 percent) are disproportionately likely to work as direct-care workers, compared with all female workers (13 percent). Similarly, a higher proportion of direct-care workers are foreign born (20 percent) compared with all female workers (13 percent). The major difference across occupation groups is that home health aides are proportionately less likely to be black and more likely to be Hispanic than the direct-care workers employed in hospital or nursing home settings.

Direct-care workers are less likely than female workers in general to be married, yet equally likely to have children under the age of 18. Correspondingly, about one-quarter of direct-care workers are single mothers, compared with 14 percent of all female workers. Nursing home aides are more likely to have children than are home health or hospital aides (50 percent, 40 percent, and 32 percent, respectively) and also have a higher likelihood of being single mothers. The average age of a direct-care worker (41 years) is not statistically different from the average for all female workers (42 years), although the average ages within the direct-care work group range from 45 years for home health aides to 38 years for nursing home aides.

Table 2 shows that 62 percent of direct-care workers have no education beyond high school. This is a striking difference compared with the female workforce as a whole, in which only 37 percent of workers have a high school education or less. At the other end of the education distribution, only 6 percent of direct-care workers have bachelors or advanced degrees, compared with 31 percent of the female workforce. The other striking comparison brought out by table 2 is that approximately the same proportion of direct-care workers have some college education compared with the rest of the female workforce. Despite the large number of direct-care workers in the lowest education group, fully 38 percent report at least some education beyond high school. Although the data do not provide information on the type of postsecondary school attended, most likely it consists of participation in training programs offered by community colleges and accredited trade schools. The Federal Government requires that certified nursing assistants complete at least 75 hours of training, and certain States require as many as

Characteristic	All female workers	Direct- care workers	Hospital aides	Nursing home aides	Home health aides
Race and ethnicity (percent distribution):					
White, non-Hispanic	70	51	55	51	49
Black, non-Hispanic	13	29	30	35	24
Other, non-Hispanic	6	5	5	4	7
Hispanic	11	15	11	10	21
Foreign born	13	20	19	17	22
Marital status (percent distribution):					
Married	54	38	35	38	39
Previously married	21	31	27	27	37
Never married	25	31	38	36	24
Children under 18 years	41	43	32	50	40
Single mothers	14	24	17	28	22
Average age (years)	42	41	40	38	45
Rural residence	15	20	17	22	19

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Table 2. Educational attainment of direct-ca [Percent distribution] Image: Comparison of the second secon	ire workers ar	id all female v	vorkers, 2006		
Education level	All female workers	Direct-care workers	Hospital aides	Nursing home aides	Home health aides
High school or less	37	62	51	65	64
Some college, no degree	22	23	31	24	19
Associate's degree	11	9	12	7	9
Bachelor's degree or higher	31	6	5	4	8
NOTE: Percentages are based on weighted da workers aged 19 years and older. Details may not su		cent due to ro Source:	bunding. March 2006 cps.		

120 hours. There is a lesser formal training requirement for licensed nursing assistants.

Across direct-care occupations, hospital aides are less likely to have a high school degree or less, and more likely to have some college, compared with the other two groups. Nursing home aides also are more likely to have some college education compared with home health aides. These differences probably are a reflection of stricter staffing regulations for hospitals and nursing homes as opposed to home health agencies or private clients.

Employment and earnings

There exist only small differences between the labor force attachment of direct-care workers and that of the female workforce overall. Both groups work an average of 37 hours per week, although direct-care workers are slightly less likely to work 35 or more hours per week (69 percent, compared with 75 percent of the full sample). (See table 3.) There is no statistically significant difference between the two groups in the average number of weeks worked per year. Across occupation groups, the only significant difference is that hospital aides and nursing home aides are more likely to be employed full time (73 percent and 77 percent, respectively) than are home health aides (61 percent).

Median hourly earnings of direct-care workers (\$9.26) are significantly lower than the average for all female workers (\$13.46).⁶ Approximately two-thirds of this difference is explained by the lower education levels of direct-care workers, and the remainder is explained by differences in race, ethnicity, and family status. Variation also exists between direct-care occupation groups: hospital aides have the highest median hourly wages (\$11.06), followed by nursing home aides (\$9.13) and home health aides (\$8.50).

Median total family income for direct-care workers in 2005 was \$29,770, compared with \$58,000 for female workers overall. The dramatically lower total family income among direct-care workers is due to their lower levels of "other" family income, composed mostly of spousal earnings, but also including assets. Recall that direct-care workers are less likely to be married than the average female worker, but equally likely to have children, and thus are more often the sole economic providers for their families. Despite their nearly full-time average weekly hours, about one-fifth of direct-care workers live in poverty and just under half live in low-income families (below 200 percent of the Federal poverty line).

Of the three direct-care occupation groups, hospital aides have the highest median family incomes, corresponding to the fact that they also have the highest wages (median hourly earnings). Interestingly, home health aides and nursing home aides have similar total family incomes despite the \$0.63 difference in their median wages. The median family income of hospital aides is about \$6,000 to \$7,000 more per year than that for each of the other two groups of direct-care workers. Nursing home aides and home health aides are approximately twice as likely to live in poverty as hospital aides and about 50 percent more likely to live in a low-income family. This higher incidence of poverty and low-income wages is partially a reflection of how close median salaries for all direct-care workers are to the poverty thresholds and partially a reflection of the higher fraction of nursing home aides and home health aides who are single mothers.

Health insurance coverage

Despite the fact that direct-care workers work in the health care sector and are exposed to above-average levels of health risk on the job,⁷ they are less likely than the average female worker to have health insurance coverage. Table 4 shows that 60 percent of direct-care workers had some type of private health insurance coverage in 2005— 38 percent through their own employers and the remaining 22 percent through either a spousal employmentsponsored insurance plan or nongroup insurance. An additional 22 percent of direct-care workers relied on

Category	All female workers	Direct care workers	Hospital aides	Nursing Home Aides	Home Health Aides
Selected hours and employment measures:					
Average hours	37	37	36	38	36
Percent full-time (35 or more hours per week)	75	69	73	77	61
Average number of weeks worked	46	44	46	44	43
Earnings and income (dollars):					
Average annual earnings	\$30,441	\$17,228	\$20,276	\$16,949	\$16,314
Average hourly earnings	\$18.58	\$14.56	\$12.06	\$12.20	\$17.84
Median hourly earnings	\$13.46	\$9.26	\$11.06	\$9.13	\$8.50
Average total family income	\$74,385	\$40,444	\$48,770	\$36,542	\$41,006
Median total family income	\$58,000	\$29,770	\$34,100	\$28,000	\$27,005
Selected earnings distribution measures:					
Percent in poverty	8	19	10	18	23
Percent low-income	22	49	34	52	51

Table 4. Health insurance coverage of d	irect-care worl	kers and all female	workers, 200	6	
Type of coverage	All female workers	All direct-care workers	Hospital aides	Nursing home aides	Home health aides
All private	78	60	84	63	49
Employer-based	51	38	63	44	23
Public	12	22	10	19	29
None	16	25	13	24	30

NOTE: Percentages are based on weighted data for female workers aged 19 years and older. Columns may sum to more than 100 percent because some workers are covered by more than one

SOURCE: March 2006 CPS.

public health insurance (primarily through Medicaid), and the remaining 25 percent had no health insurance coverage.

Health insurance coverage varies widely with the direct-care workers' employment setting. Such variation is not surprising, given that the cost and availability of health insurance vary a great deal by the size of the employer and that the three types of direct-care workers analyzed here tend to work for employers of different size.⁸ Hospital aides, who usually work for much larger employers than other direct-care workers, have the highest rates of private health insurance coverage (84 percent), and nearly twothirds (63 percent) receive health insurance through their own employers. A small proportion relies on public health insurance (10 percent), and only 13 percent are uninsured. Home health aides, by contrast, have much lower levels of private health insurance coverage (49 percent), and only 23 percent receive coverage through their employer. The use of public-sector health insurance is relatively high among home health aides (29 percent), but even so, nearly onethird of them have no health insurance.

Compared with all female workers, direct-care workers are more likely to be uninsured or use public health insurance and less likely to have private-sector health insurance. Lower rates of employer-sponsored health insurance for direct-care workers may reflect either fewer employers offering coverage, less than full participation in available insurance plans, or both. Often, health insurance coverage is provided only for full-time employees, and home health aides are less likely to work full time than are other workers. In addition, direct-care workers might not utilize employer health insurance even when it is offered to them, because they are unable to afford the employee contributions. The amount that employees are required to contribute to health insurance premiums has risen dramatically in recent years,⁹ and the average required employee contribution to a health insurance plan in 2006 was \$2,973 for family coverage,¹⁰ or 10 percent of median gross family income for a direct-care worker.

Turnover

The labor market for direct-care workers is characterized by very high levels of turnover. State-level studies of turnover in nursing homes report annual rates that range from 25 percent to well over 100 percent.¹¹ Turnover is costly for the employer,¹² who must recruit and train a replacement worker, and in the case of paid caregivers, turnover causes a discontinuity in care. High levels of turnover have even been shown to adversely affect patient outcomes in nursing home settings.¹³

Although turnover from job to job can be problematic, what may be of more concern is that a significant fraction of the workers leaving direct-care jobs are actually leaving the occupation altogether.¹⁴ The analysis of employment transitions that follows uses a matched file from the 2005 and 2006 CPS's to look at whether women in direct-care jobs in 2005 remained in the occupation 1 year later.

Among women employed in the direct-care workforce in 2005, 60 percent remained in the occupation a year later, while 33 percent left the field to work in another occupation, and 7 percent left the labor force entirely.¹⁵ Between 2005 and 2006, hospital aides were more likely to remain in the direct-care occupation (19 percent) than leave it (13 percent), while home health aides were more likely to leave the field than remain (48 percent and 38 percent, respectively).

Because characteristics predicting whether a woman will remain working in a caregiving occupation are closely related to one another-for example, less educated women also tend to have lower wages-a logit regression model was used to ascertain the independent effects of several key characteristics on the likelihood of remaining in the caregiving profession 1 year later (from 2005 to 2006), with each of the other factors statistically controlled for. The odds ratios presented in what follows indicate the relationship between the characteristic in question and the likelihood of remaining in the direct-care occupation group relative to a woman in the reference category. Thus, an odds ratio of 1.0 indicates that a woman with a given characteristic is as likely to remain in the occupation 1 year later as a woman with the specified reference or comparison characteristic. Ratios under 1.0 (over 1.0) indicate that a woman is less (more) likely to remain in the occupation.

Table 5 gives the results for this logit model of turn-

Characteristic	Odds ratio	
Direct-care occupation:		
Hospital aide	¹ 2.39	
Nursing home aide	¹ 1.65	
Home health aide	1.00	
ogarithm of annual personal earnings	¹ 1.21	
Average hours worked per week	.99	
Employer health insurance	.88	
Any college	.74	
/larried	.99	
Children under 18 years	¹ 1.63	
Race and ethnicity:		
White, non-Hispanic	1.00	
Black, non-Hispanic	1.19	
Other, non-Hispanic	.58	
Hispanic	¹ 1.71	
\ge	¹ 1.02	
Sample size	482	
Chi-square	41.9	
Degrees of freedom	12	

Odds ratios for leaving a direct-care

Table 5.

over. Hospital aides are about 2.4 times as likely as home health aides to remain in the direct-care occupation when differences in demographics, earnings, and health insurance coverage rates are controlled for. Nursing home aides are approximately 1.7 times as likely as home health aides to remain in the direct-care occupation.

Higher annual earnings are associated with a higher likelihood of remaining in the direct-care occupation. After controlling for the specific direct-care occupation, hours, and demographic factors, the model indicates that the odds of remaining in the occupation 1 year later, in 2006, are 2.1 percent higher for every 10-percent increase in wages. It is not clear, however, whether this finding reflects a causal relationship, because workers who have been in any occupation longer may earn higher wages due to their longer tenure and also may be more likely to stay in the occupation for an additional year for reasons having nothing to do with wages. Nonetheless, the finding is at least suggestive of a turnover-reducing effect of higher wages.

Several demographic characteristics have significant effects on the probability of staying in the direct-care occupation. Workers with children under 18 years are 1.63 times as likely as childless workers to remain in the direct-care workforce. Hispanic women are 1.7 times as likely as white, non-Hispanic women to remain in the direct-care workforce over the 1-year period. Finally, older direct-care workforce for each year that they age. The model reveals no statistically significant correlations between turnover and any of the following characteristics: weekly hours worked, the provision of health insurance, education, and marital status.

The future of the direct-care workforce

Currently, about 6 million Americans over the age of 65 require assistance to manage their everyday activities.¹⁶ To serve the needs of these individuals, 2.7 million Americans worked as direct-care workers in 2006.¹⁷ Between 2000 and 2030, the over-65 population is projected to more than double, to 70 million.¹⁸ Consequently, two direct-care jobs—home health aide and home care aide—are now the fastest-growing occupations, and their growth is projected to continue through 2012.¹⁹ The actual growth in direct-care employment, of course, depends upon whether supply will meet growing demand—an important issue

because the survey evidence suggests that long-termcare providers in many areas of the country are already experiencing labor market shortages.²⁰

The current direct-care workforce has median hourly earnings that are more than 30 percent lower than that of the overall female workforce in the United States. This difference is largely explained by a higher proportion of nonwhite and foreign-born workers, as well as lower education levels, in the direct-care profession. Direct-care workers also are significantly less likely than other workers to have health insurance coverage, particularly coverage through an employer, and the rate at which employees leave the occupation from one year to the next is almost 40 percent. The analysis presented in this article shows, among other things, that there are significant differences in turnover rates for the three types of direct-care workers analyzed. All of the workers, however, appear to stay on the job longer when wages are higher. Given the important role that Medicaid and other forms of public funding play in determining compensation for direct-care workers, and considering the range of public policies that target wages for less skilled workers, this finding may be informative in thinking about how to deal with the growing demand for long-term care that will undoubtedly take place as the American population ages.

Notes

¹ Statistical Abstract of the United States: 2007, 126th edition (U.S. Census Bureau, 2006); on the Internet at www.census.gov/compendia/ statab (visited Sept. 25, 2007).

2 Ibid.

³ *Green Book* (U.S. Congress, House of Representatives, Committee on Ways and Means, 2004).

⁴ Bernadette Wright, "Direct Care Workers in Long-Term Care" (Washington, DC, AARP Public Policy Institute, 2005).

⁵ This analysis of 1-year workforce retention rates is based on an individual matched file created from the 2005 and 2006 CPS files. Households participate in the survey on a rotating basis. Each household is interviewed for 4 consecutive months, dropped from the sample for 8 months, and then reinstated for 4 additional months. Therefore, roughly 40 percent of the households interviewed in the spring of 2005 also were interviewed 1 year later, in the spring of 2006. Because of sample attrition due to geographic mobility, interviewer error, processing problems that arise in linking the same individuals across the two surveys, and response error, the individual linked file obtained represents approximately 32 percent of the original 2005 sample.

⁶ Because the variable used to classify occupation is for the longest job worked in the previous year, hourly earnings are calculated from

total annual earnings in 2005 divided by annual hours worked in 2005.

⁷ Between 2003 and 2005, the occupation group consisting of nursing aides, attendants, and orderlies had the third-highest rate of nonfatal on-the-job injuries, behind (1) laborers and freight, stock, and material movers and (2) heavy-truck drivers and tractor-trailer drivers and ahead of construction laborers and light-truck or delivery service drivers. (See "Nonfatal Occupational Injuries and Illnesses Requiring Days Away from Work, 2005" (Bureau of Labor Statistics, Nov. 17, 2006), on the Internet at www.bls.gov/news.release/pdf/osh2.pdf (visited Sept. 22, 2007).

⁸ A total of 59.2 percent of home health services and 51.7 percent of nursing homes in 2004 had fewer than 20 employees, compared with 13 percent of hospitals. (See "Statistics of U.S. Businesses: 2004: NAICS 62: Health Care and Social Assistance, United States" (U.S. Census Bureau, Oct. 2, 2006), on the Internet at **www.census.gov**/ **epcd/susb/latest/us/US62.HTM** (visited Sept. 22, 2007).

⁹ Jonathan Gruber and Robin McKnight, "Why Did Employee Health Insurance Contributions Rise?" Economic Research Initiative on the Uninsured, ERIU Working Paper 9 (Ann Arbor, MI, University of Michigan, 2002).

¹⁰ Gary Claxton, Jon Gabel, Isadora Gil, Jeremy Pickreign, Heidi Whitmore, Benjamin Finder, Bianca DiJulio, and Samantha Hawkins,

"Health Benefits In 2006: Premium Increases Moderate, Enrollment in Consumer-Directed Health Plans Remains Modest," *Health Affairs*, November/December 2006, pp. w476–w485.

¹¹ Wright, "Direct Care Workers."

¹² Dorie Seavey, *The Cost of Frontline Turnover in Long-Term Care*, Better Jobs Better Care Practice and Policy Report (Washington, DC, Institute for the Future of Aging Services, October 2004).

¹³ Theresa Barry, Diane Brannon, and Vincent Mor, "Nurse Aide Empowerment Strategies and Staff Stability: Effects on Nursing Home Resident Outcomes," *The Gerontologist*, June 2005, pp. 309–17.

¹⁴ Rebecca Crosby Hutchison, *New Hampshire's Care Gap: The Healthcare Workforce Shortage* (Concord, NH, New Hampshire Community Loan Fund, February 2001).

¹⁵ The small total sample size (482 direct-care workers and 356 childcare workers) for both 2005 and 2006 prohibits examining separately those who change occupations and those who exit the labor force.

¹⁶ Paraprofessional Healthcare Institute and North Carolina Department of Health and Human Services, "Results of the 2003 National Survey of State Initiatives on the Long-Term Care Direct-Care Workforce" (New York, Paraprofessional Healthcare Institute, 2004).

¹⁷ Kristin Smith and Regan Baughman, *Low Wages Prevalent in Direct Care and Child Care Workforce* (Durham, NH, Carsey Institute, summer 2007).

¹⁸ "Table 2a. Projected Population of the United States by Age and Sex: 2000 to 2050" (U.S. Census Bureau, 2007), on the Internet at www.census.gov/ipc/www/usinterimproj/natprojtab02a.pdf (visited Jan. 3, 2007).

¹⁹ Daniel Hecker, "Occupational employment projections to 2012," *Monthly Labor Review*, February 2004, pp. 80–105.

²⁰ Paraprofessional Healthcare Institute and North Carolina Department of Health and Human Services, "Results of the 2003 National Survey."