

# Occupational Composition of the Elder Care Industries, May 2005

By Audrey Watson

As the first of the baby boomers turned 60 this year, the United States is in the midst of one of the most notable demographic trends of the past century: the aging of the U.S. population. The growth of the elderly population has significant economic implications for the coming decades. Among these implications are effects on the Nation's industrial and occupational structure, as the economy adapts to accommodate the special needs of the aged. This article looks at four industries: home health care services, nursing care facilities, community care facilities for the elderly, and services for the elderly and disabled—here collectively called the elder care industries. Due to their focus on a primarily elderly clientele, these industries are likely to be highly affected by this demographic trend. In particular, the article focuses on the occupational composition of these industries, examining both the general occupational structure and selected detailed occupations.

## The elderly population

The share of the U.S. population that is elderly has risen steadily throughout the last 100 years. In 1900, 4.1 percent of the U.S. population was age 65 or older. By 1950, the elderly made up 8.1 percent of the population, and by 2000, this share had risen to 12.4 percent. This demographic trend is expected to continue well into this century. By 2030, 19.7 percent of the population is projected to be 65 or older, and by 2050, nearly 21 percent of the population is projected to be in this age group. Within the older population, there has been an especially sharp rise in the share of the very old, those 85 or older. While this group made up only about 0.2 percent of the population in 1900 and 0.4 percent in 1950, the 2000 census showed 1.5 percent of the population to be in this age group, a figure that is expected to rise to 2.6 percent in 2030 and to nearly 5 percent in 2050.<sup>1</sup>

The needs of this growing elderly population differ from those of the population at large, particularly with respect to health status and physical and mental impairment. Illness and

disability are especially prevalent among the very old, who are also more likely than younger seniors to live in nontraditional residential settings, such as nursing care facilities.<sup>2</sup> Older Americans—and in particular the very old, with their more specialized needs—constitute the primary clientele for the four elder care industries: home health care services, nursing care facilities, community care facilities for the elderly, and services for the elderly and persons with disabilities. While companies in many industries will need to take the expanding elderly population into account as part of a successful business strategy, for these elder care industries the number and needs of older Americans serve as fundamental determinants of the industries' size, structure, and future.

## Overview of the elder care industries

The four elder care industries provide a variety of residential, health care, and other services to the elderly population. The first of these industries, *home health care services*, specializes in providing skilled nursing services in the patient's own home. In addition, establishments in this industry may provide personal care; homemaker and companion services; counseling; or physical, occupational, and vocational therapy. Home health care agencies, in-home hospice care, and visiting nurse associations are examples of establishments found in this industry. *Nursing care facilities* provide inpatient nursing and rehabilitative services, generally for an extended period of time. Nursing homes, homes for the elderly with nursing care, inpatient hospices, and convalescent homes or hospitals (except psychiatric) are classified in this industry. *Community care facilities* for the elderly provide residential and personal care services, including room, board, supervision, and assistance in activities of daily living, for

<sup>1</sup> Historical census data are from Frank Hobbs and Nicole Stoops, *Demographic Trends in the 20th Century* (U.S. Census Bureau, Census 2000 Special Reports, Series CENSR-4, 2002), p. 56, figure 2–4. Population projections data are from U.S. Census Bureau, *U.S. Interim Projections by Age, Sex, Race, and Hispanic Origin*, table 2a, Projected Population of the United States, by Age and Sex: 2000 to 2050. [Online, 2004]. Available at <http://www.census.gov/ipc/www/usinterimproj/>.

<sup>2</sup> *Older Americans Update 2006: Key Indicators of Well-Being* (Washington, Federal Interagency Forum on Aging-Related Statistics, 2006), p. 54.

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the elderly and other persons who either are unable or prefer not to live independently. Establishments in this industry may also provide nursing care in separate onsite facilities. Assisted living facilities, continuing care retirement communities, and rest homes or homes for the elderly without nursing care are found in this industry. Finally, *services for the elderly and persons with disabilities* provide a variety of nonresidential social assistance services to the elderly and disabled. These services include adult day care, nonmedical home care or homemaker services, social activities, group support, and companionship.

With over 1.6 million employees in 2005, nursing care facilities have the highest employment among the elder care industries, nearly twice as high as employment in the next largest industry, home health care services. Nursing care facilities represent approximately 10 percent of healthcare and social assistance sector employment, and home health care services represent an additional 5 percent. Community care facilities for the elderly employed over 600,000 workers in 2005, or about 4 percent of total healthcare and social assistance employment. Services for the elderly and persons with disabilities has the smallest employment of the four industries; with just under 500,000 workers, this industry employs about 3 percent of all workers in the healthcare and social assistance sector.<sup>3</sup>

### Employment growth

With the exception of nursing care facilities, the elder care industries have experienced phenomenal employment growth over the last decade and a half. Total nonfarm employment grew by 22 percent between 1990 and 2005, and by only slightly more than 1 percent between 2000 and 2005.<sup>4</sup> In contrast, employment in home health care services grew by 183 percent between 1990 and 2005, and 29 percent between 2000 and 2005. Services for the elderly and disabled experienced a comparable employment growth rate of 173 percent over the 1990–2005 period, and in recent years has grown even more rapidly than home health care services: 56 percent between 2000 and 2005. While below the extraordinary growth rates of these two industries, the growth rate for community care facilities for the elderly has also been much higher than average: 85 percent between 1990 and 2005, and 28 percent between 2000 and 2005. Nursing care facilities,

<sup>3</sup> Bureau of Labor Statistics, Quarterly Census of Employment and Wages. [Online]. Available at <http://www.bls.gov/cew/home.htm>. The Quarterly Census of Employment and Wages (QCEW) program publishes a quarterly count of employment and wages reported by employers covering 98 percent of U.S. jobs, available at the county, MSA, state, and national levels by industry. Data are preliminary 2005 annual averages for all employees. Data represent all types of ownership, although 92 percent or more of employment in these industries is in the private sector.

<sup>4</sup> Bureau of Labor Statistics, Current Employment Statistics. [Online]. Available at <http://www.bls.gov/ces/home.htm>. The Current Employment Statistics (CES) program conducts a monthly survey of about 160,000 businesses and government agencies, representing approximately 400,000 individual worksites, in order to provide detailed industry data on employment, hours, and earnings of workers on nonfarm payrolls.

however, have grown at a rate much more comparable to that of total nonfarm employment. Between 1990 and 2005, employment in nursing care facilities grew by 35 percent, but between 2000 and 2005, it grew by only about 4 percent. The relatively slow growth rate of this industry may reflect the increased availability of alternative forms of care, such as home health care or community care facilities, which may be preferred to nursing care facilities by the elderly population. Trend data show that nursing home residents have become older and less independent since the 1970s, consistent with this interpretation of nursing homes as a “last resort” for the oldest and frailest of seniors.<sup>5</sup>

Building on this history of fast employment growth, several of the elder care industries are expected to continue to grow rapidly in the near future. While overall nonfarm employment is projected to grow 13 percent between 2004 and 2014, employment in the home health care services industry is projected to grow by nearly 70 percent, or over 537,000 workers, over this same period. Based on this projection, home health care services is expected to be the second-fastest-growing industry in percentage terms over this period, and the eighth largest in terms of absolute job growth. Similarly, community care facilities for the elderly are projected to grow by over 319,000 workers between 2004 and 2014; this projected 55-percent employment increase is sufficient to make it the fifth-fastest-growing industry in percentage terms. Services for the elderly and disabled are projected to grow by over 150,000 workers, or nearly 39 percent. Nursing care facilities are the exception: with projected employment growth of less than 12 percent (181,300 workers), this industry is expected to grow more slowly than employment as a whole.<sup>6</sup>

### Aging of the elderly

The elder care industries—at least those for which supplemental data are available—appear to serve a particularly vulnerable segment of the elderly population. According to data from the 2000 census, of the population 65 and older, approximately 53 percent were 65 to 74, 35 percent were 75 to 84, and the rest were 85 or older.<sup>7</sup> However, of the 71 percent of

<sup>5</sup> Decker, F. H. *Nursing homes, 1977–99: What has changed, what has not?* (Hyattsville, MD, National Center for Health Statistics, 2005), p. 5. For example, less than 6 percent of nursing home residents could bathe independently and less than 13 percent could dress independently in 1999, down from 13 percent and 30 percent, respectively, in 1977. However, disability rates in the general elderly population have fallen in recent years: an age-adjusted 20 percent of Medicare enrollees 65 and older were disabled in 1999, down from 25 percent in 1984 (*Older Americans Update 2006*, p. 28).

<sup>6</sup> Bureau of Labor Statistics, 2004–2014 employment projections. [Online]. Available at <http://www.bls.gov/emp/home.htm>. Data on industries with the largest projected employment increases are from Bureau of Labor Statistics, 2004–2014 employment projections, “Fastest Growing Industries.” [Online, 2005]. Available at <http://www.bls.gov/emp/empfastestind1.htm>. The Office of Occupational Statistics and Employment Projections develops information about the labor market for the Nation as a whole for 10 years in the future.

<sup>7</sup> Hetzel, Lisa, and Annetta Smith, *The 65 Years and Older Population: 2000* (U.S. Census Bureau, Census 2000 Brief, C2KBR/01-10, 2001), table 1.

home health care patients who are 65 or older, about 25 percent are in the 65 to 74 age group, 44 percent are 75 to 84, and 31 percent are 85 or older.<sup>8</sup> The nursing home population is skewed even more heavily towards the oldest seniors. Ninety percent of nursing home residents are 65 or over; of these, only 13 percent are 65 to 74, 35 percent are 75 to 84, and the majority—nearly 52 percent—are 85 or older.<sup>9</sup> Community care facilities are also disproportionately utilized by older seniors. While only about 1 percent of those 65 through 74 live in community housing with services, 8 percent of those 85 and older live in this type of residential setting.<sup>10</sup>

Users of these services are older than the general senior population and are more likely to have functional limitations. Of the population 65 and older who live in a traditional community, 27 percent have limitations in one or more activities of daily living (ADLs). However, about 47 percent of residents of community housing with services and 82 percent of residents of long term care facilities have ADL limitations.<sup>11</sup> Similarly, of users of home health care services 65 and over, 59 percent received help with one or more ADLs.<sup>12</sup> For both nursing home residents and clients of home health care services, bathing and dressing were the two activities most likely to require assistance.<sup>13</sup> In addition to assistance with ADLs, elderly clients also received a range of medical and other services. Of home health care patients 65 and older, 74 percent received skilled nursing services; 51 percent received personal care; and 36 percent received therapeutic services, such as occupational or physical therapy.<sup>14</sup> In nursing homes, nearly all patients 65 and older—over 96 percent—had received nursing services in the last 30 days. Nearly 91 percent

<sup>8</sup> National Center for Health Statistics, National Home and Hospice Care Survey, current home health care patients, p. 1, table 1, and author's calculations. [Online, 2004]. Available at <http://www.cdc.gov/nchs/data/nhhcsd/curhomecare00.pdf>. NCHS surveys hospice care separately from nursing homes and home health care, although under the North American Industry Classification System, inpatient hospice care is classified in nursing care facilities and home hospice care is classified in home health care services.

<sup>9</sup> *The National Nursing Home Survey, 1999 Summary* [Hyattsville, MD, National Center for Health Statistics, DHHS Publication No. (PHS) 2002-1723, 2002], p. 12, table 7, and author's calculations.

<sup>10</sup> *Older Americans Update 2006*, p. 54.

<sup>11</sup> *Older Americans Update 2006*, p. 56. Persons with ADL limitations have difficulty performing or are unable to perform for health reasons one or more of the following: bathing, dressing, eating, getting in/out of chairs, walking, or using the toilet. Persons without ADL limitations may still require assistance with instrumental activities of daily living, such as using the telephone, light or heavy housework, meal preparation, shopping, or managing money.

<sup>12</sup> National Home and Hospice Care Survey, 2004, p. 10, table 9, and author's calculations. Note that these data measure the percentage of patients for whom home health care agencies provide help with a functional limitation; this may not be the same as the percentage who possess a functional limitation, since some patients may receive help from other sources, such as friends or relatives.

<sup>13</sup> National Home and Hospice Care Survey, 2004, p. 10, table 9; *National Nursing Home Survey, 1999 Summary*, 2002, p. 24, table 19; and author's calculations.

<sup>14</sup> National Home and Hospice Care Survey, 2004, p. 7, table 7; *National Nursing Home Survey, 1999 Summary*, 2002, p. 26, table 21; and author's calculations.

had received personal care, 71 percent had received social services, 26 percent had received physical therapy, and 18 percent had received occupational therapy.

The needs of this population, coupled with the types of services provided by these establishments, offer clues to the occupational composition of these industries. Because of the high levels of nursing and other health care services provided, healthcare workers are clearly a vital component of these industries. Social service and personal care occupations are also important, while nursing care and community care facilities must provide additional services associated with a residential setting, such as food service and housekeeping. The next section provides a broad overview of the staffing patterns in the four elder care industries, focusing on the breakdown among major occupational groups.

### General occupational composition

Because they serve the same general population and provide some overlap in services, the four elder care industries share some basic features of occupational composition. For example, health care workers make up a large percentage of employment in all four industries, while personal care and service occupations are also important in several of the industries. Similarly, employment of certain other occupational groups, such as computer and mathematical occupations and construction and extraction occupations, is negligible in all four industries. However, the four industries also exhibit some variation in occupational composition, with the industries providing the narrowest range of services or focusing strongly on a particular subset of the elderly population generally showing the least occupational diversity. This section provides a broad overview of occupational composition in the four elder care industries. Although the focus is on the distribution of employment across major occupational groups, key detailed occupations will also be highlighted, some of which will be discussed later in more detail.

Home health care, which provides the narrowest range of services—primarily health care and personal care services in the client's own home—appears to have the least varied occupational composition of the four industries. Nearly 84 percent of employment is concentrated in just three occupational groups: healthcare support occupations, healthcare practitioner and technical occupations, and personal care and service occupations. These occupations make up 33 percent, 26 percent, and 25 percent of industry employment, respectively. (See table 1 and chart 1.)

Employment also tends to be concentrated in only a few occupations within each of these groups. In the healthcare support occupational group, 84 percent of employment is in a single occupation, home health aides. Because of this occupation's close association with the home health care services industry, home health aides is also the industry's largest occupation, employing over 224,000 workers and making up nearly 28 percent of total industry employment. Almost all of the remaining employment in the healthcare support

**Table 1. Employment in elder care industries by major occupational group, May 2005**

Major occupational group	Home health care services		Nursing care facilities		Community care facilities for the elderly		Services for the elderly and persons with disabilities	
	Employment	Percent of industry total	Employment	Percent of industry total	Employment	Percent of industry total	Employment	Percent of industry total
Total.....	806,460		1,576,680		602,640		438,210	
Management occupations .....	24,890	3.1%	43,470	2.8%	20,540	3.4%	15,610	3.6%
Business and financial operations occupations.....	7,160	0.9	9,180	0.6	4,000	0.7	5,450	1.2
Computer and mathematical occupations .....	1,720	.2	640	.0	330	.1	660	0.2
Life, physical, and social science occupations .....	870	.1	1,080	.1	740	.1	1,200	.3
Community and social services occupations.....	19,260	2.4	24,700	1.6	10,260	1.7	48,300	11.0
Legal occupations.....	30	.0	110	.0	NA	NA	140	.0
Education, training, and library occupations.....	220	.0	470	.0	200	.0	10,810	2.5
Arts, design, entertainment, sports, and media occupations .....	880	.1	890	.1	610	.1	1,270	.3
Healthcare practitioner and technical occupations .....	208,330	25.8	363,640	23.1	70,180	11.6	15,300	3.5
Healthcare support occupations .....	266,060	33.0	666,940	42.3	227,230	37.7	88,420	20.2
Protective service occupations .....	170	.0	3,020	.2	4,650	.8	430	.1
Food preparation and serving related occupations .....	1,430	.2	176,950	11.2	110,450	18.3	10,060	2.3
Building and grounds cleaning and maintenance occupations .....	3,330	.4	108,170	6.9	47,720	7.9	8,810	2.0
Personal care and service occupations.....	201,410	25.0	44,610	2.8	44,260	7.3	179,100	40.9
Sales and related occupations .....	2,460	.3	1,570	.1	1,690	.3	1,060	.2
Office and administrative support occupations.....	64,710	8.0	71,440	4.5	35,300	5.9	33,440	7.6
Construction and extraction occupations.....	NA	NA	190	.0	320	.1	NA	NA
Installation, maintenance, and repair occupations .....	880	.1	21,100	1.3	12,830	2.1	1,660	.4
Production occupations .....	320	.0	34,950	2.2	6,470	1.1	NA	NA
Transportation and material moving occupations.....	2,310	.3	3,540	.2	4,810	.8	15,340	3.5

NOTE: Data may not add to 100 percent due to rounding.  
NA indicates data not available.

group is composed of nursing aides, orderlies, and attendants. Employment in the personal care and services occupational group is even more concentrated, with over 98 percent of workers in this group employed as personal and home care aides. With over 198,000 workers, this is the second largest occupation in the industry.

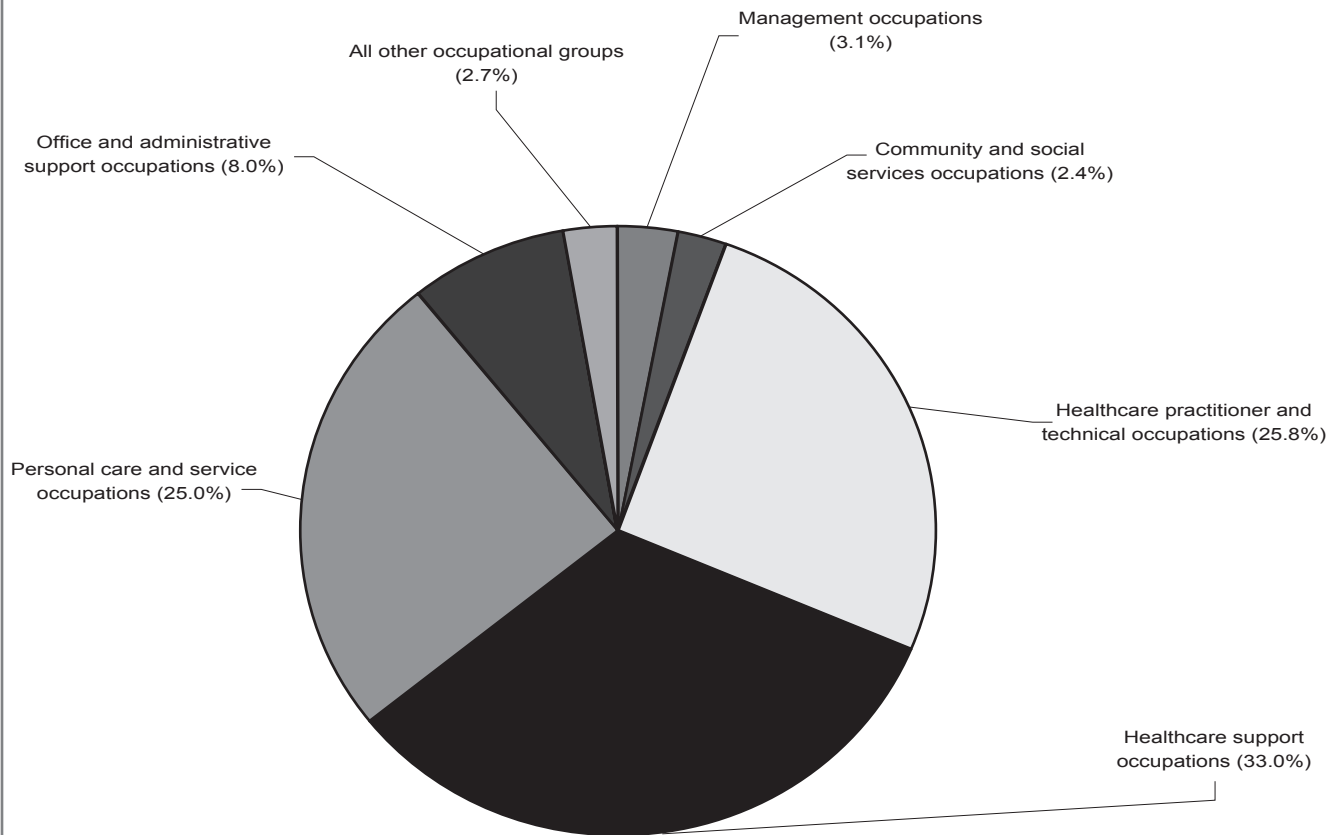
Employment in the healthcare practitioner and technical occupations is slightly more diversified. About 56 percent of employees in this occupational group are registered nurses (117,050 workers), and an additional 25 percent are licensed practical and licensed vocational nurses (52,700 workers). In addition to nursing care, general home health care, and personal care, establishments in this industry may also provide more specialized services, including various types of therapy, nutrition services, and medications. Consequently, an additional 8 percent of employment in this group is made up of physical therapists (16,360 workers), and the industry also employs smaller but still significant numbers of occupational therapists, respiratory therapists, speech language pathologists, dietitians and nutritionists, pharmacists, pharmacy technicians, and medical records and health information technicians.

Outside of these healthcare and personal care occupations, only three other occupational groups make up more than 1

percent of employment in home health care services. Office and administrative support occupations make up about 8 percent of industry employment, with employment split across a variety of occupations in this group. Management occupations account for an additional 3 percent of industry employment. Within this occupational group, medical and health services managers make up about 42 percent of employment, and general and operations managers account for about another 32 percent. Finally, community and social service occupations make up 2 percent of industry employment. Medical and public health social workers, social and human service assistants, and clergy are the three largest occupations in this group.

Healthcare support and healthcare practitioner and technical workers are the two largest occupational groups in nursing care facilities. (See table 1 and chart 2.) Because nursing homes generally serve the oldest and most ill segment of the elderly population, healthcare occupations make up an even larger percentage of employment in this industry than in home health care services. Although healthcare practitioner and technical occupations make up only 23 percent of this industry, as compared with nearly 26 percent of the home health care industry, this is more than offset by a higher percentage of healthcare support workers, who make up 42

**Chart 1. Percent distribution of employment in home health care services by major occupational group, May 2005**



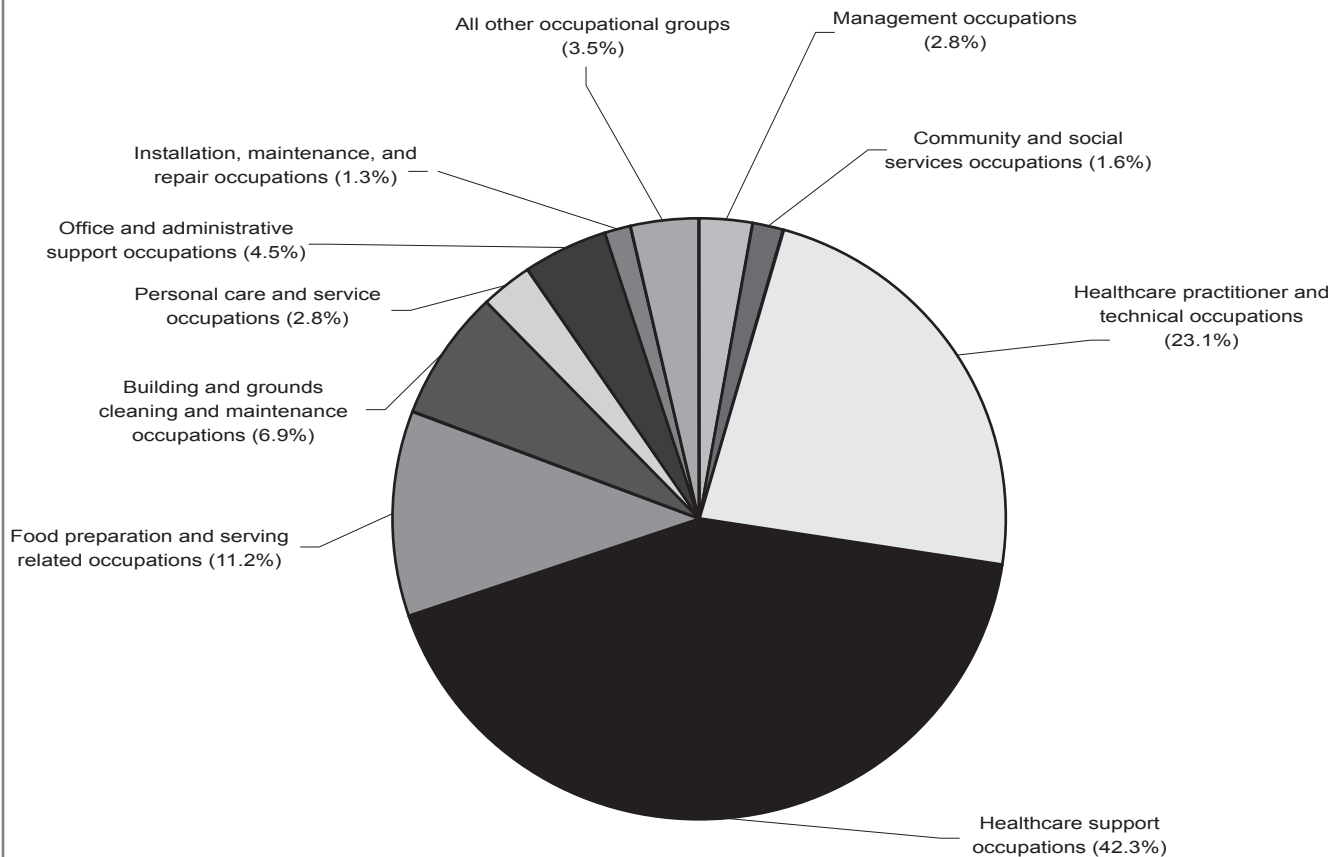
percent of nursing home employment, versus 33 percent in home health care services. In addition, the greater size of this industry means that it employs a larger absolute number of healthcare workers than do the other elder care industries. Nursing care facilities employ over 363,000 healthcare practitioner and technical workers and nearly 667,000 healthcare support workers, while home health care services, the second largest employer of both types of workers among the elder care industries, employs about 208,000 and 266,000 workers, respectively.

While home health aides constitute the largest occupation in the home health care services industry, nursing aides, orderlies, and attendants are the backbone of the nursing home workforce. This occupation makes up nearly 90 percent of healthcare support workers in nursing homes and, with over 599,000 workers, is the largest single occupation in this industry. Home health aides, who made up nearly the entire healthcare support occupational group in the home health care services industry, account for less than 7 percent of healthcare support employment in this industry. As in the home health care services industry, registered nurses and li-

censed practical and licensed vocational nurses are the two largest healthcare practitioner and technical occupations by a large margin, together making up about 84 percent of this occupational group. However, the relative importance of these two occupations differs between the two industries. Nursing homes employ about 120,000 registered nurses and nearly 187,000 licensed practical and licensed vocational nurses, or about 1.6 licensed practical and licensed vocational nurses per registered nurse. This differs noticeably from the ratio of approximately 0.5 licensed practical and licensed vocational nurses per registered nurse found in home health care services. The third largest occupation in this group, medical records and health information technicians, employs 12,660 workers. Nursing homes also employ significant numbers of dietitians and nutritionists, dietetic technicians, physical therapists, occupational therapists, recreational therapists, respiratory therapists, and speech language pathologists.

Although personal care and service occupations, and in particular personal and home care aides, made up a large proportion of home health care services employment, this occupational group makes up less than 3 percent of employ-

**Chart 2. Percent distribution of employment in nursing care facilities by major occupational group, May 2005**



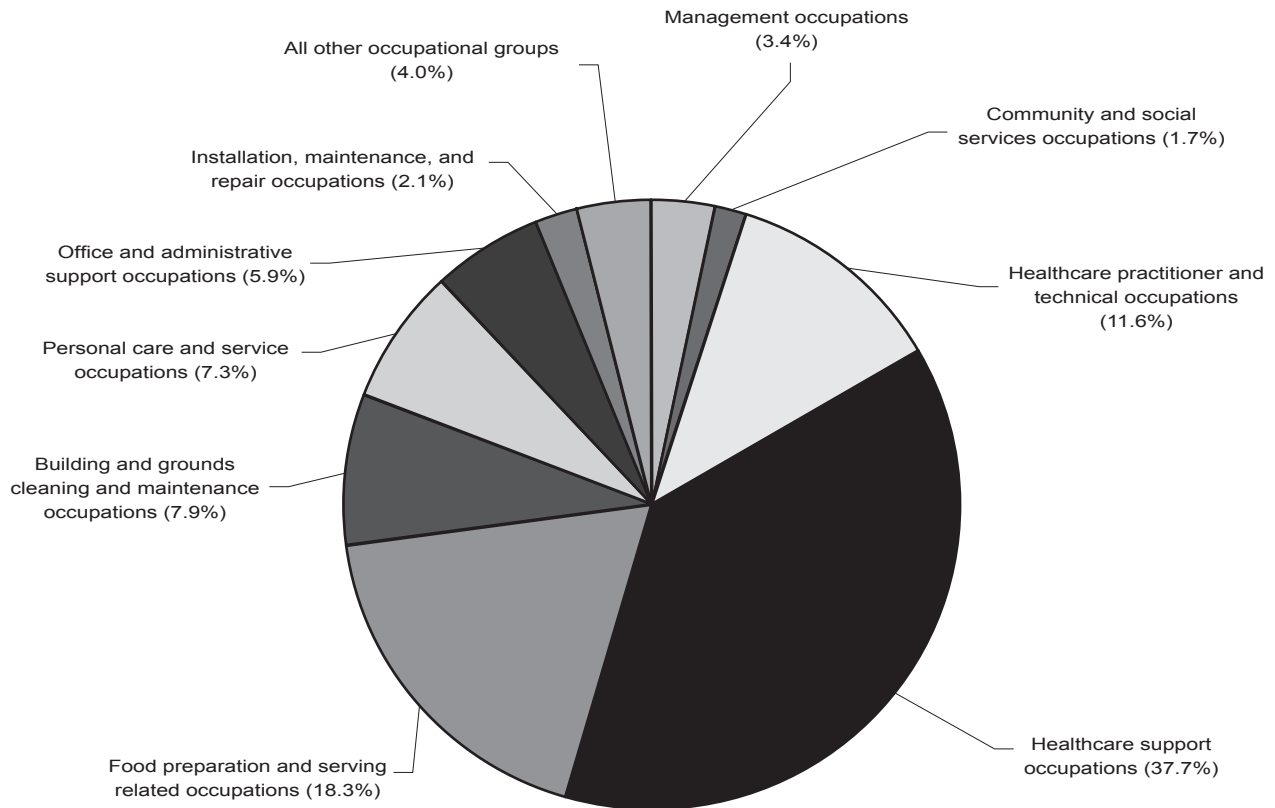
ment in nursing care facilities. Recreation workers make up about 69 percent of employment in this group, with personal and home care aides making up most of the remainder. The tasks carried out by personal and home care aides in a home care setting—such as cleaning, doing laundry, and preparing meals—are generally carried out by other staff in nursing homes. For example, over 11 percent of workers in nursing care facilities are in food preparation and serving related occupations, while nearly 7 percent are in building and grounds cleaning and maintenance occupations, primarily maids and housekeeping cleaners and janitors. Similarly, slightly over 2 percent of employment is made up of production workers, almost all of whom are laundry and dry-cleaning workers.

At nearly 3 percent of total employment, the proportion of management occupations in nursing homes is similar to that in home health care services, with medical and health services managers and general and operations managers the two largest occupations in this group. Office and administrative support workers make up about 4.5 percent of employment. Finally, community and social services occupations make up about 1.6 percent of industry employment. About

44 percent of these employees are medical and public health social workers, with social and human service assistants, rehabilitation counselors, and clergy making up most of the remaining employment in this group. Each of the remaining occupational groups makes up less than 1 percent of employment in this industry.

Like nursing care facilities, community care facilities provide the fuller variety of services associated with a residential environment, and therefore have a more diversified staffing pattern than found in home health care services. (See table 1 and chart 3.) The two healthcare occupational groups make up nearly half (49 percent) of employment; however, this is less than the corresponding shares of 59 percent in home health care services and 65 percent in nursing care facilities. Within the healthcare practitioner and healthcare support group, registered nurses and licensed practical and licensed vocational nurses are once again the two largest occupations, making up about 85 percent of employment in this group. The ratio of 1.5 licensed practical and vocational nurses to registered nurses is about the same as the ratio of 1.6 found in nursing homes. This is perhaps not surprising, since establishments in

**Chart 3. Percent distribution of employment in community care facilities for the elderly by major occupational group, May 2005**



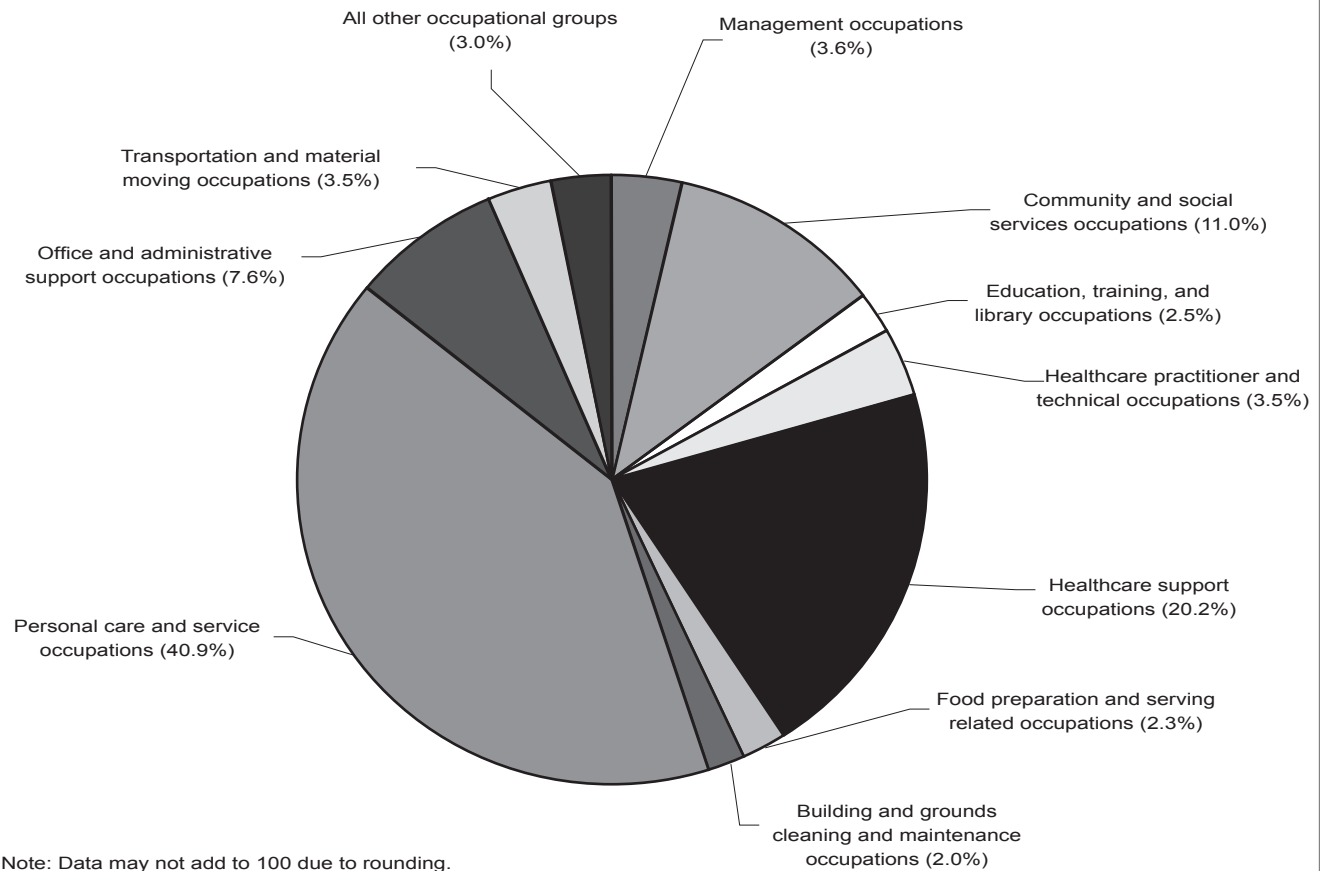
Note: Data may not add to 100 percent due to rounding.

this industry may provide skilled nursing care in separate on-site facilities, which presumably use a staffing pattern similar to that found in stand-alone nursing homes. Dietitians and nutritionists, dietetic technicians, medical records and health information technicians, occupational therapists, physical therapists, and recreational therapists are among the other occupations with significant employment in this group, though at levels far below those for the nursing occupations.

Home health aides and nursing aides, orderlies, and attendants make up nearly 97 percent of the healthcare support group. While one or the other of these occupations dominated in the home health care and nursing care industries, both occupations are prevalent in this industry: community care facilities employ approximately 92,000 home health aides and 128,000 nursing aides, orderlies, and attendants. The two occupations may be relatively similar in importance because these facilities can provide healthcare services both in home and in nursing facilities, with residents moving between the two settings as their needs dictate.

With over 18 percent of total employment, food preparation and serving related occupations are the second largest occupational group in this industry, after healthcare support occupations (38 percent of employment) and ahead of healthcare practitioner and technical occupations (12 percent of employment). Institutional and cafeteria cooks are the largest occupation in this group, followed by waiters and waitresses; nonrestaurant food servers; food preparation workers; and combined food preparation and serving workers, including fast food. Building and grounds cleaning and maintenance occupations, primarily maids and housekeeping cleaners, make up nearly 8 percent of industry employment. Personal care and service occupations make up over 7 percent of employment, with two occupations, personal and home care aides and recreation workers, making up about 84 percent of employment in this group. Office and administrative support occupations make up a further 6 percent of industry employment. At around 3 percent of industry employment, the proportion of management occupations in this industry is

**Chart 4. Percent distribution of employment in services for the elderly and persons with disabilities by major occupational group, May 2005**



roughly comparable to that in both nursing care facilities and home health care services. General and operations managers and medical and health services managers are the two largest occupations in this group, with about 6,000 workers each. Installation, maintenance, and repair occupations account for about 2 percent of industry employment, with about 92 percent of workers in this group classified as general maintenance and repair workers. Community and social service occupations also make up about 2 percent of industry employment. As in the nursing home industry, social and human service assistants, medical and public health social workers, rehabilitation counselors, and clergy are among the largest occupations in this group. Production workers are the only remaining group making up at least 1 percent of employment; this industry is similar to nursing care facilities in that almost all of the employees in this group are laundry and dry-cleaning workers.

The final industry, services for the elderly and persons with disabilities, provides a variety of primarily nonmedical services, including day care, homemaking, and social activities. Consequently, this industry has a much lower concentration of employment in healthcare occupations than do the other

elder care industries. Less than 25 percent of workers are employed in the two healthcare occupational groups, compared with nearly half or more in the other elder care industries. (See table 1 and chart 4.) With slightly over 20 percent of industry employment, healthcare support occupations remain a major source of employment, representing the second largest occupational group in this industry. However, healthcare practitioner and technical occupations make up less than 4 percent of industry employment, roughly comparable to the employment share of management occupations. Within the healthcare support group, home health aides make up about 90 percent of employment; nursing aides, orderlies, and attendants comprise most of the remainder. About 49 percent of healthcare practitioner and technical workers are registered nurses. Licensed practical and licensed vocational nurses make up an additional 23 percent of employment in this group. Occupational therapists and speech-language pathologists are the third- and fourth-largest occupations, although the employment difference between these two occupations is not statistically significant.

Although healthcare support workers represent the largest occupational group in the other three eldercare industries,



personal care and service occupations have by far the largest employment share in services for the elderly and persons with disabilities. At nearly 41 percent of total employment, these occupations have more than twice the employment share of healthcare support workers. This employment share is also much higher than the 25 percent share of personal care and service occupations in the home health care industry. However, because of its larger size, the latter industry employs a larger absolute number of these workers. As in the home health care industry, the vast majority of workers in this group are personal and home care aides, who make up about 89 percent of occupational group employment. Recreation workers, child care workers, and first-line supervisors/managers of personal care and service workers are the next largest occupations in this group, each making up between 3 and 4 percent of occupational group employment.

Community and social service occupations represent the third largest occupational group in this industry, with 11 percent of industry employment. By comparison, this occupational group has an employment share of about 2 percent or less in the other elder care industries. No single occupation dominates in this major group. While social and human service assistants represent the largest occupation, with about 35 percent of group employment, the remaining employment is split among rehabilitation counselors, medical and public health social workers, mental health and substance abuse social workers, and several other occupations.

Office and administrative support occupations make up nearly 8 percent of industry employment, and transportation and material moving occupations account for nearly 4 percent. Of the four elder care industries, services for the elderly and persons with disabilities is the only industry to have an employment share of more than 1 percent in this occupational group. Bus drivers, school (including drivers of disabled and elderly clients); taxi drivers and chauffeurs; and truck drivers, light or delivery services make up about 83 percent of these workers. This industry is also the only one of the four to employ a significant number of education, training, and library workers. However, with the exception of self-enrichment education teachers, most of the workers in this group appear to be more likely to serve the industry's other constituency, persons with disabilities, than to serve the elderly. Within this group, teacher assistants are the largest occupation, representing about 43 percent of group employment; special education teachers, preschool, kindergarten, and elementary school; self-enrichment education teachers; and preschool teachers, except special education, make up most of the remaining employment.

Food preparation and serving related occupations and building and grounds maintenance and cleaning occupations each represent about 2 percent of industry employment. Reflecting the nonresidential nature of these establishments, these employment shares are lower than the corresponding shares in nursing care facilities and community care facilities for the elderly, although slightly higher than the shares in

home health care services. The remaining occupational groups each make up roughly 1 percent or less of this industry.

### **Selected detailed occupations in the elder care industries**

The preceding discussion illustrates the consistent importance of several occupations across the elder care industries, such as registered nurses and personal and home care aides. This section takes a closer look at these two occupations as well as licensed practical and licensed vocational nurses; nursing aides, orderlies, and attendants; home health aides; medical and public health social workers; occupational therapists; physical therapists; speech-language pathologists; physical therapist assistants; and physical therapist aides. These occupations were chosen either because they make up a large proportion of employment in the elder care industries, or because one or more of the elder care industries represent major employers of workers in the occupation. In addition, all are occupations having direct contact with elderly patients or clientele. Finally, these occupations represent a wide spectrum of skill and education requirements, ranging from jobs requiring a bachelor's or master's degree, such as registered nurses and the therapist professions, to those requiring only a short period of on-the-job training, such as personal and home care aides.

As a group, these occupations share some common features that are worth noting. First, they are highly female dominated. According to the 2005 Current Population Survey (CPS), with about 69 percent, physical therapists have the lowest proportion of women among the selected occupations<sup>15</sup> (By comparison, women make up about 46 percent of the overall labor force.) The remaining occupations have even higher percentages of women, with the two nursing occupations, occupational therapists, and speech-language pathologists, each employing over 90 percent.

Second, with some exceptions, black and Hispanic workers appear to be concentrated in the less skilled and lower paying of these occupations. CPS data show that about 13 percent of the overall labor force is Hispanic or Latino. However, the percentage of Hispanic workers is well below the labor force average in nearly all of the selected occupations. Of the 11 occupations under review, only personal and home care aides, nursing aides, and home health aides have higher-than-average percentages of Hispanic workers. For example, nearly 16 percent of personal and home care aides are Hispanic, and although no separate data are available for the other two occupations, the combination of nursing, psychiatric, and home health aides is 15 percent Hispanic. Similarly, these lower skilled occupations have a relatively high

<sup>15</sup> Bureau of Labor Statistics, *Employment and Earnings*, table 11, Employed persons by detailed occupation, sex, race, and Hispanic or Latino ethnicity. [Online, 2006]. Available at <http://www.bls.gov/cps/cpsaat11.pdf>. The Current Population Survey is a monthly survey of households conducted by the Bureau of Census for the Bureau of Labor Statistics. It provides a comprehensive body of data on the labor force, employment, unemployment, and persons not in the labor force.

proportion of black or African American workers. Over 24 percent of personal and home care aides and nearly 33 percent of nursing, psychiatric, and home health aides are black or African American, compared with nearly 11 percent of the overall labor force. However, unlike Hispanic workers, black or African American workers appear to be well represented in the highly skilled nursing professions. Nearly 22 percent of licensed practical and licensed vocational nurses are black or African American, while the percentage of registered nurses who are black or African American is, at 10 percent, close to the labor force average. Although separate data are not available for medical and public health social workers, social workers as a whole have relatively high minority representation: 19 percent of them are black or African American and nearly 10 percent are Hispanic or Latino. This stands in sharp contrast to the similarly highly skilled therapist professions, which have low percentages of both black and Hispanic workers. The percentage of Asian workers in these selected occupations ranges from less than 1 percent for speech-language pathologists to 12 percent for occupational therapists, but most occupations are within 1 or 2 percentage points of the 4.4-percent labor force average.

Third, because of their association with the fast growing elder care industries, and with the health care sector in general, employment growth in several of the occupations is predicted to be extremely strong over the next few years. For example, home health aides have the fastest projected growth rate of any occupation, with an expected 56 percent employment increase between 2004 and 2014.<sup>16</sup> This occupation is also eighth in terms of projected employment increase, with an expected increase of 350,000 jobs over the same period.<sup>17</sup> Similarly, registered nurses are projected to add the second largest number of jobs between 2004 and 2014, approximately 703,000 workers. For some of these occupations, strong projected growth is compounded by high replacement needs due to the aging of the current workforce. In particular, the average age of registered nurses was nearly 47 in 2004, higher than the workforce average, and has been increasing steadily over the past two decades.<sup>18</sup>

The remainder of this section focuses on industry employment and wage information for these selected occupations, along with brief descriptions of the occupations' duties and education and training requirements.

**Registered nurses.** These workers provide direct patient care, but may also have supervisory and administrative duties. For example, in nursing homes, registered nurses may develop

treatment plans and supervise licensed practical and licensed vocational nurses and nursing aides. In home health care, on the other hand, they may supervise home health aides and instruct family members in patient care.<sup>19</sup> Registered nurses are employed in all four of the elder care industries, but are particularly important in nursing care facilities and home health care services. Registered nurses make up about 8 percent of total employment in the former industry, and about 15 percent of employment in the latter.

Approximately 57 percent of registered nurses are employed in a single industry, general medical and surgical hospitals, making this industry by far the largest employer of workers in this occupation. Other large employers are offices of physicians, which employ about 9 percent of registered nurses; nursing care facilities and home health care services, which each employ about 5 percent of registered nurses; and employment services, which employ about 4 percent. (See table 2.) By comparison, community care facilities for the elderly and services for the elderly and persons with disabilities are relatively small employers of registered nurses. This occupation makes up about 4 percent of employment in community care facilities and 1 percent of employment in services for the elderly and persons with disabilities, and each of these industries employs 1 percent or less of the total registered nurse workforce.

Registered nurses are the most skilled of the nursing and related healthcare support occupations. According to the 2004 National Sample Survey of Registered Nurses, the highest level of preparation was a diploma from a hospital-administered nursing program for 17.5 percent of registered nurses, an associate degree for 33.7 percent, a baccalaureate degree for 34.2 percent, and a master's or doctoral degree for 13.0 percent. Over the past 20 years, educational preparation has shifted away from diploma programs towards associate, baccalaureate, and higher degrees, with the highest percentage increase (339 percent from 1980 to 2004) occurring among those for whom the highest level of preparation was a master's or doctoral degree.<sup>20</sup> This trend reflects the greater professional opportunities for those with higher levels of education. A bachelor's degree is considered a prerequisite for many administrative positions and for admission into graduate nursing programs. Advanced practice nurses, such as nurse practitioners, nurse anesthetists, clinical nurse specialists, and nurse midwives, require at least a master's degree. These nurses often function as primary care specialists, especially in underserved areas.<sup>21</sup>

The mean wage across all industries for registered nurses was \$27.35 per hour, or \$56,880 annually. However, pay in all four of the elder care industries is below this average,

<sup>16</sup> Bureau of Labor Statistics, 2004–2014 employment projections, "Fastest growing occupations, 2004–2014." [Online, 2005]. Available at <http://www.bls.gov/emp/emptab21.htm/>.

<sup>17</sup> Bureau of Labor Statistics, 2004–2014 employment projections, "Occupations with the largest job growth, 2004–2014." [Online, 2005]. Available at <http://www.bls.gov/emp/emptab3.htm/>.

<sup>18</sup> *The Registered Nurse Population: National Sample Survey of Registered Nurses, March 2004, Preliminary Findings* (U.S. Department of Health and Human Services, Bureau of Health Professions, 2005), p. 5.

<sup>19</sup> *The Impact of the Aging Population on the Health Workforce in the United States* (Albany, NY, Center for Workforce Studies, School of Public Health, University at Albany, 2005), p. 109.

<sup>20</sup> *The Registered Nurse Population*, 2005, pp. 3–4.

<sup>21</sup> *Occupational Outlook Handbook, 2006–2007 Edition* (Bureau of Labor Statistics, 2006). [Online]. Available at <http://www.bls.gov/oco/home.htm/>.

Table 2. Occupational employment in elder care industries by selected detailed occupation, May 2005

Selected occupation	Home health care services	Percent of total occupational employment	Nursing care facilities	Percent of total occupational employment	Community care facilities for the elderly	Percent of total occupational employment	Services for the elderly and persons with disabilities	Percent of total occupational employment
Medical and public health social workers .....	10,720	9.6%	10,890	9.7%	2,190	2.0%	5,690	5.1%
Registered nurses .....	117,050	4.9	120,200	5.1	24,320	1.0	7,540	0.3
Occupational therapists .....	5,920	6.8	7,980	9.1	1,050	1.2	1,150	1.3
Physical therapists .....	16,360	10.8	9,870	6.5	1,350	0.9	590	.4
Speech-language pathologists .....	2,910	3.1	3,840	4.1	540	.6	940	1.0
Licensed practical and licensed vocational nurses .....	52,700	7.4	186,560	26.3	35,320	5.0	3,500	.5
Home health aides .....	224,410	33.8	44,010	6.6	92,170	13.9	80,020	12.1
Nursing aides, orderlies, and attendants.....	35,170	2.5	599,310	43.1	128,150	9.2	6,180	.4
Physical therapist assistants .....	2,750	4.7	5,930	10.1	830	1.4	120	.2
Physical therapist aides .....	280	0.7	4,130	9.8	590	1.4	50	.1
Personal and home care aides.....	198,120	35.0	8,570	1.5	25,560	4.5	159,350	28.1

ranging from \$23.87 per hour in community care facilities for the elderly to \$26.23 in home health care services. (See table 3.) Of the five industries with the highest employment of registered nurses, employment services, which include temporary help services, has the highest pay, with a mean hourly wage of \$31.12. The two largest employers, general medical and surgical hospitals and offices of physicians, pay \$27.80 and \$27.03, respectively, near the cross-industry average and higher than all of the elder care industries.

**Licensed practical and licensed vocational nurses.** Providing basic patient care, these workers take vital signs, change dressings, take blood or other samples, give injections, and attend to patients' comfort by assisting with bathing, dressing, and personal hygiene. Depending on State law, they may also start intravenous fluids or give medications. To qualify as a licensed practical or licensed vocational nurse, workers must pass a state licensing exam after completing an approved training program, usually a 1-year program at a vocational or technical school.<sup>22</sup>

Nursing care facilities are the largest employer of licensed practical and licensed vocational nurses, employing over 186,000 workers, or 26 percent of this occupation. General medical and surgical hospitals are the second largest employer, employing an additional 24 percent of these workers. Of the other elder care industries, home health care services employ about 7 percent of the workers in this occupation. Community care facilities for the elderly employ another 5 percent, while services for the elderly and persons with disabilities employs less than 1 percent of these workers.

The mean hourly wage for licensed practical and licensed vocational nurses is \$17.41, or \$36,210 annually. Among the five largest employers of these workers, employment services

is again the highest paying, with an average wage of \$20.31. Although registered nurses received lower-than-average pay in all of the elder care industries, this is not the case for licensed practical and licensed vocational nurses, where only services for the elderly and persons with disabilities pays below the cross-industry average. The mean hourly wage for nursing care facilities is \$18.06, and for home health care services it is \$18.18. Community care facilities for the elderly pay slightly above the cross-industry average, with a mean hourly wage of \$17.81.

**Nursing aides, orderlies, and attendants.** The core of the healthcare paraprofessional workforce is nursing aides, orderlies, and attendants. Workers in these entry level jobs generally have a high school diploma or equivalent, although approximately 17 percent do not meet this requirement. Completing 75 hours of training offered by high schools, vocational and technical schools, and some community colleges and nursing care facilities and passing a state competency exam, qualifies workers as certified nurse assistants (CNAs). This certification is required by the Centers for Medicare and Medicaid Services for work in nursing care facilities.<sup>23</sup> Nursing aides, orderlies, and attendants carry out basic patient care tasks under the supervision of nursing and other medical staff. These duties may include taking vital signs; helping patients bathe, eat, or dress; serving meals; and helping patients in and out of bed.

As with licensed practical and licensed vocational nurses, nursing care facilities are the largest employer of nursing aides, orderlies, and attendants, employing over 599,000 workers or 43 percent of this occupation. General medical and surgical hospitals are again the second largest employer, employing an additional 27 percent of these workers. Community care facilities for the elderly employ approximately

<sup>22</sup> Unless otherwise indicated, this and subsequent descriptions of occupational duties and qualifications are from Bureau of Labor Statistics, *Occupational Outlook Handbook, 2006–2007 Edition*, 2006.

<sup>23</sup> *The Impact of the Aging Population on the Health Workforce in the United States*, p. 113.

Table 3. Mean hourly wages in elder care industries by selected detailed occupations, May 2005

Selected occupation	Mean hourly wages				
	All industries	Home health care services	Nursing care facilities	Community care facilities for the elderly	Services for the elderly and persons with disabilities
Medical and public health social workers .....	\$20.52	\$23.01	\$18.57	\$18.04	\$16.43
Registered nurses .....	27.35	26.23	24.76	23.87	24.42
Occupational therapists .....	28.41	32.85	29.08	27.45	23.51
Physical therapists.....	31.42	34.65	31.12	31.40	26.84
Respiratory therapists.....	22.24	22.99	22.51	21.30	NA
Speech-language pathologists .....	27.89	31.82	32.57	32.63	27.50
Licensed practical and licensed vocational nurses.....	17.41	18.18	18.06	17.81	16.28
Home health aides.....	9.34	9.06	9.40	8.89	9.12
Nursing aides, orderlies, and attendants.....	10.67	10.00	10.33	9.91	9.36
Occupational therapist assistants.....	19.13	21.52	19.53	20.88	16.52
Occupational therapist aides .....	13.20	14.03	13.16	11.39	11.43
Physical therapist assistants .....	18.98	21.61	20.18	20.09	16.30
Physical therapist aides.....	11.01	10.70	11.84	11.60	12.01
Personal and home care aides.....	8.52	7.52	9.08	8.87	8.81

NA indicates data not available.

9 percent of nursing aides, orderlies, and attendants, making this industry the third largest employer of this occupation. Home health care services employ about 2.5 percent of these workers, reflecting the fact that most of the routine health care tasks in this industry are instead performed by home health aides, while services for the elderly and disabled employs less than 1 percent of this occupation.

Nursing aides, orderlies, and attendants is a relatively low paid occupation, with a mean hourly wage of \$10.67. Wages for all four elder care industries pay below this average, while of the five largest employers of these workers, the highest paying are local government (\$11.78) and employment services (\$11.56). Of the four elder care industries, the largest employer, nursing care facilities, also has the highest mean hourly wage, \$10.33. Community care facilities for the elderly pay an average of \$9.91 per hour, home health care services average \$10.00 per hour, and services for the elderly and persons with disabilities average \$9.36 per hour.

**Home health aides.** Like nursing aides, orderlies, and attendants, home health aides are considered paraprofessional workers. These workers perform tasks similar to those performed by nursing aides, except they do so in the patient’s own home rather than in an institutional setting. Home health aides whose employers receive reimbursement from Medicare must pass a competency exam, and some States require a license. However, educational requirements for home health aides are generally low, and a high school diploma is not usually required.

Home health care services are the largest employer of home health aides, employing approximately 34 percent of workers in this occupation. Residential mental health facilities are the second largest employer, with about 16 percent of occupational employment. In addition to home health care

services, the other elder care industries are also significant employers of these workers: community care facilities employ nearly 14 percent of this occupation, services for the elderly and persons with disabilities employ about 12 percent, and nursing care facilities employ nearly 7 percent.

Pay for home health aides is somewhat lower than for nursing aides, orderlies, and attendants, with a mean hourly wage of \$9.34. With the exception of nursing care facilities, which pay a wage similar to the cross-industry average, the elder care industries have below average pay for this occupation. Mean hourly wages are \$9.12 in services for the elderly and persons with disabilities, \$9.06 in home health care services, and \$8.89 in community care facilities for the elderly. However, none of the largest employers of this occupation pays a wage higher than that of nursing care facilities, and of these highest paid industries for this occupation, only one, State government, with a mean hourly wage of \$14.24, employs a significant number of workers (17,100).

**Personal and home care aides.** These workers provide a variety of services to clients to enable them to live outside of an institutional setting. These services may include doing laundry, shopping, housecleaning, planning and preparing meals, and assisting with bathing and dressing. Explicitly excluded are health care related services. While some States require formal training, in others, only on-the-job training is necessary. Voluntary certification is available through the National Association for Home Care and Hospice.

Of the four elder care industries, employment of personal and home care aides is highest in the industries that are associated with nonresidential settings: home health care services and services for the elderly and persons with disabilities. Over 198,000 personal and home care aides, or 35 percent of total occupational employment, are in home health

care services, making it the largest employer of this occupation. An additional 28 percent of these workers are employed in services for the elderly and persons with disabilities. In residential settings, many of these services, such as cleaning and laundry, are performed by workers specializing in these tasks. Consequently, community care facilities for the elderly employ less than 5 percent of personal and home care aides, and nursing care facilities employ less than 2 percent.

Of the occupations surveyed here, personal and home care aides are the lowest paid, with a mean hourly wage of \$8.52. Home health care services, the largest employer of these workers, pay \$7.52 per hour. The other elder care industries, however, pay somewhat above the cross-industry average, ranging from a mean hourly wage of \$8.81 in services for the elderly and persons with disabilities to \$9.08 in nursing care facilities. Of the five largest employers of personal and home care aides, residential mental health facilities and vocational rehabilitation services are the highest paying, with mean hourly wages of \$9.41 and \$9.35, respectively.

**Medical and public health social workers.** These professionals provide services for individuals, families, or populations faced with illness. Their services may include counseling, advising family members or caregivers, and arranging for services, such as physical therapy or home care, after discharge from a hospital or other facility. In a nursing care or home care setting, social workers may also supervise paraprofessional workers, such as nursing aides or home health aides. Medical and public health social workers are highly skilled. While a bachelor's degree is the minimum requirement for most entry level jobs, many jobs, including those in health care settings, typically require a master's degree in social work. In addition, licensing, certification, or registration is required in all States and the District of Columbia, although the exact requirements vary by State.

With total employment of around 112,000 workers, this occupation is numerically less important than those discussed above. However, the elder care industries are major employers of these workers. General medical and surgical hospitals are the largest employers of medical and public health social workers, with about 29 percent of occupational employment. Nursing care facilities and home health care services each employ about 10 percent of the occupation. Services for the elderly and persons with disabilities employ about 5 percent of this occupation, while community care facilities for the elderly employ about 2 percent.

Wages for medical and public health social workers, though below those for registered nurses and the therapy professions, are well above those for nursing aides, home care aides, and similar occupations. The mean hourly wage for this occupation is \$20.52, or \$42,690 annually. Of the largest employers of these workers, only home health care services and general medical and surgical hospitals pay above average wages. The remaining three elder care industries all pay below average wages; at only \$16.43, services for the elderly

and persons with disabilities has the lowest wage of the four industries.

**Physical therapists, occupational therapists, and speech-language pathologists.** The therapy professions help patients restore functions lost through disease, injury, or aging, and assist patients in finding ways of dealing with the loss of these functions. Physical therapists focus specifically on improving physical functioning, by increasing mobility, reducing pain, and preventing or limiting permanent physical disabilities. Treatment often includes exercise to restore strength, flexibility, balance, or coordination. Physical therapists may also use massage or other techniques to reduce pain, and instruct patients in the use of assistive devices, such as wheelchairs or prostheses.

Occupational therapists, on the other hand, focus on helping patients improve their ability to carry out tasks associated with daily living, such as dressing, preparing food, or bathing. Occupational therapy may include exercises to improve physical proficiency at these tasks, instruction in the use of assistive devices to replace lost physical abilities, and exercises and techniques to improve decision making, problem solving, and other mental skills. With respect to the elderly population, the goal of occupational therapy is to allow patients to maintain or recover the ability to live independently. Both physical and occupational therapists may work with assistants and aides; physical therapist assistants and physical therapist aides are profiled below. Although speech-language pathologists are often associated with helping young children overcome speech difficulties, in the older population, they may assist patients in reacquiring speech, language, or swallowing skills lost because of strokes or other medical conditions.

Like medical and public health social workers, the three therapy professions are not numerically as large as nursing or health care paraprofessional occupations. However, two of the elder care industries, home health care services and nursing care facilities, are among the largest employers of all three professions. Physical therapists are the largest of the three occupations, with total employment of approximately 151,000 workers. While offices of other health practitioners and general medical and surgical hospitals are the two largest employers of physical therapists, home health care services employ nearly 11 percent and nursing care facilities employ nearly 7 percent of physical therapists, making them the third- and fourth-largest employers of these workers. Total employment of speech-language pathologists is approximately 95,000, with over half of them working in elementary and secondary schools. Offices of other health practitioners employ about 14 percent of speech-language pathologists, and general medical and surgical hospitals employ an additional 11 percent. Nursing care facilities make up approximately 4 percent of occupational employment, and home health care services make up 3 percent of employment.

Finally, there are over 87,000 occupational therapists in the workforce. General medical and surgical hospitals em-

ploy about 26 percent of this occupation. Other significant employers are offices of other health practitioners, with 20 percent of occupational employment; and elementary and secondary schools, with 14 percent of occupational employment. Nursing care facilities employ about 9 percent of occupational therapists, and home health care services employ an additional 7 percent. The two remaining elder care industries each employ slightly over 1 percent of occupational therapists, and 1 percent or less of speech-language pathologists and physical therapists.

The therapy professions require high levels of education. All three of these occupations generally require at least a master's degree, and all States have some type of licensing or certification requirement for these occupations.<sup>24</sup> Reflecting their high educational requirements, these professions are relatively high paying. Physical therapists have the highest average wage of the three, with a mean hourly wage of \$31.42 or \$65,350 annually. Occupational therapists have a mean hourly wage of \$28.41 or \$59,100 annually. Wages for speech-language pathologists are slightly above those for registered nurses, at \$27.89 an hour or \$58,000 annually.

Although wages in the elder care industries have not been high for many of the occupations examined, these industries appear to have better relative wage levels for the therapy professions. Home health care services pay above average wages for all three occupations, and is one of the highest paying industries for both occupational therapists and physical therapists. Nursing care facilities pay above average wages for two of the three occupations (physical therapists are the exception). Community care facilities for the elderly have above average wages for speech language pathologists, although wages are near the cross-industry average for the other two occupations. Only in services for the elderly and persons with disabilities are wages for these workers consistently near or below the occupational averages.

### ***Physical therapist assistants and physical therapist aides.***

Workers in these occupations assist physical therapists in providing services to clients. Of the two occupations, physical therapist assistants are the more skilled; this occupation, like licensed practical and licensed vocational nurses, represents an intermediate point between the highly skilled registered nurse and therapist occupations and lower skilled occupations like nursing aides. Physical therapist assistants typically have an associate degree, and may need to be licensed or registered in some States. Under supervision of a physical therapist, these workers perform treatment procedures with patients, such as exercises, massage, and ultrasound. Physical therapist aides, on the other hand, do not perform clinical tasks. Instead, they work under the supervision of a physical therapist or physical therapist assistant to keep the treatment area organized, prepare for upcoming therapy sessions, and

<sup>24</sup> *Occupational Outlook Handbook*, 2006. Although the current minimum education requirement for physical therapists is a bachelor's degree, a master's degree will be required beginning in 2007.

assist patients in moving to and from treatment areas. Physical therapist aides usually have a high school diploma, and learn their skills through on-the-job training.

Numerically, both occupations are relatively small: estimated employment for May 2005 was 58,670 for physical therapist assistants and 41,930 for physical therapist aides. Offices of other health practitioners and general medical and surgical hospitals are the largest employers for both occupations. However, nursing care facilities employ approximately 10 percent of each occupation, making them among the largest employers for both occupations. Home health care services are among the largest employers of physical therapist assistants, with nearly 5 percent of occupational employment, although this industry is not a significant employer of physical therapist aides. Community care facilities for the elderly and services for the elderly and persons with disabilities are not major employers of these workers.

Physical therapist assistants earn a mean hourly wage of \$18.98, roughly comparable to the \$17.41 earned by licensed practical and licensed vocational nurses, who have similar skill requirements. With the exception of services for the elderly and persons with disabilities, the elder care industries have above average wages for physical therapist assistants. In fact, home health care services, nursing care facilities, and community care facilities for the elderly are among the highest paying industries for this occupation. Wages for physical therapist aides are comparable with, although somewhat above, those for the paraprofessional healthcare occupations such as home health aides and nursing aides, orderlies, and attendants. The average hourly wage in this occupation is \$11.01. Although none of the elder care industries ranks among the highest paying industries for this occupation, home health care, with a mean hourly wage of \$10.70, is the only one of the four industries that does not have an above average wage.

### **Summary**

The growth of the elderly population has significant implications for the U.S. economy, particularly for those industries that primarily serve an elderly clientele. This article examines four such industries: home health care services, nursing care facilities, community care facilities for the elderly, and services for the elderly and persons with disabilities. In line with the expected growth in their client population, these industries are projected to be some of the Nation's fastest growing over the next several years. The exception is nursing care facilities, which are affected by consumer preference shifts towards other models of care.

For those industries for which data are available, evidence suggests that establishments in these industries serve a particularly aged and vulnerable subset of the elderly population. This is reflected in their staffing patterns, which contain a high proportion of healthcare practitioner and technical and healthcare support occupations. Personal care and service occupations, primarily personal and home care aides, are also a

significant source of employment in several of the industries. Overall, BLS Occupational Employment Statistics data suggest that among the four industries, home health care services has the least diversified staffing pattern, perhaps because it provides the narrowest range of services. Nursing care facilities and community care facilities for the elderly are the most similar in terms of staffing patterns of the four industries, despite the smaller number of healthcare practitioner and technical occupations in community care facilities. Both industries have heavy concentrations of healthcare workers, but also have workers associated with the demands of a residential setting, such as food service. Finally, services for the elderly and persons with disabilities appears to be least like the other industries in terms in its relatively low proportion of healthcare workers, though personal care and service occupations and community and social services occupations make up a large percentage of this industry.

Finally, the article examines selected detailed occupations that either make up a significant proportion of employment in one or more elder care industries, or for which the elder care industries are important employers. In keeping with the overall staffing patterns of these industries, most are healthcare occupations, although medical and public health social workers and personal and home care aides are also included. Occupational Employment Statistics data are used to look at the distribution of these occupations across industries and to compare occupational wages in the elder care industries to those of other industries.

The high projected growth rate of the elder care industries and of the health care sector in general, implies correspondingly high growth for key occupations in these industries. Many of the selected occupations are predicted to be among the fastest growing occupations in terms of growth rates, number of jobs added, or both, over the next several years. At the same time, some of these occupations are experiencing the aging of their own workforces, with high percentages of workers expected to retire in the near future. Most of these occupations are heavily dominated by women; for some occupations, such as registered nurses, changing employment opportunities for young women may present a barrier to recruiting new entrants. In other occupations—particularly lower skilled occupations such as home health aides and nursing aides, orderlies, and attendants—low pay and benefits, the unpleasant nature of some duties, and the lack of opportunity for advancement may create difficulties in recruiting and retaining employees.

Finally, although there are some exceptions—particularly in home health care services, which pays relatively high wages for several occupations—the elder care industries are generally not among the highest paid industries for these occupations. This suggests that these industries may have some difficulty recruiting scarce workers to these occupations from competing industries. Maintaining a sufficiently large workforce to care for the growing elderly population represents a potential challenge facing the U.S. economy over the next several decades.