

# BASIC STATISTICS ABOUT HOME CARE

Updated 2004

National Association for Home Care & Hospice

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Home care in the United States is a diverse and dynamic service industry. Approximately 20,000 providers deliver home care services to 7.6 million individuals who require services because of acute illness, long-term health conditions, permanent disability, or terminal illness. Annual expenditures for home health care are projected to be \$38.3 billion in 2003.<sup>1</sup>

## 1. HOME CARE PROVIDERS

The first home care agencies were established in the 1880s. Their number grew to some 1,100 by 1963 and to about 20,000 currently.<sup>2</sup> Home health agencies, home care aide organizations, and hospices are known collectively as “home care organizations.”

### a. Medicare-certified Agencies

Home care agencies of various types have been providing high quality, in-home services to Americans for more than a century. However, Medicare’s enactment in 1965 greatly accelerated the industry’s growth. Medicare made home care services, primarily skilled nursing and therapy, available to the elderly. In 1973, these services were extended to certain disabled younger Americans. Between 1967 and 1985, the number of agencies certified to participate in the Medicare program grew by more than three-fold, from 1,753 to 5,983. In the mid-1980s, the number of Medicare-certified home care agencies leveled off at around 5,900 as a result of increasing Medicare

paperwork and unreliable payment policies. These problems led to a lawsuit brought against the Health Care Financing Administration (HCFA) in 1987 by a coalition of US Congress Members led by Reps. Harley Staggers (D-WV) and Claude Pepper (D-FL), consumer groups, and the National Association for Home Care (NAHC). The successful conclusion of this lawsuit gave NAHC the opportunity to participate in rewriting the Medicare home care payment policies. Following these revisions, Medicare’s annual home care outlays increased significantly and the number of home care agencies rose to over 10,000.

The number of hospital-based and freestanding proprietary agencies grew faster than any other type of certified agency following the coverage clarifications taking effect. Freestanding proprietary agencies comprise over 55 percent and hospital-based agencies approximate 24 percent of Medicare-certified agencies. This differs markedly from the industry composition in the early 1980s, when public health agencies dominated the ranks of certified agencies and proprietary and hospital-based agencies combined accounted for only one-fourth of the total. Table 1 shows the changes over time in types of agencies participating in Medicare.

By the end of 2001, the number of Medicare-certified home health agencies declined to 6,861. At the end of 2003, there were 7,265 Medicare-certified home health agencies in the US. NAHC believes the 30.4 percent

**Table 1. Number of Medicare-certified Home Care Agencies, by Auspice, for Selected Years, 1967-2003**

Year	FREESTANDING AGENCIES						FACILITY-BASED AGENCIES			
	VNA	COMB	PUB	PROP	PNP	OTH	HOSP	REHAB	SNF	TOTAL
1967	549	93	939	0	0	39	133	0	0	1,753
1975	525	46	1,228	47	0	109	273	9	5	2,242
1980	515	63	1,260	186	484	40	359	8	9	2,924
1985	514	59	1,205	1,943	832	4	1,277	20	129	5,983
1990	474	47	985	1,884	710	0	1,486	8	101	5,695
1991	476	41	941	1,970	701	0	1,537	9	105	5,780
1992	530	52	1,083	1,962	637	28	1,623	3	86	6,004
1993	594	46	1,196	2,146	558	41	1,809	1	106	6,497
1994	586	45	1,146	2,892	597	48	2,081	3	123	7,521
1995	575	40	1,182	3,951	667	65	2,470	4	166	9,120
1996	576	34	1,177	4,658	695	58	2,634	4	191	10,027
1997	553	33	1,149	5,024	715	65	2,698	3	204	10,444
1998	460	35	968	3,414	610	69	2,356	2	166	8,080
1999	452	35	918	3,192	621	65	2,300	1	163	7,747
2000	436	31	909	2,863	560	56	2,151	1	150	7,152
2001	425	23	867	2,835	543	68	1,976	1	123	6,861
2002	430	27	850	3,027	563	79	1,907	1	119	7,007
2003	439	27	888	3,402	546	74	1,776	0	113	7,265

**Source:** Centers for Medicare & Medicaid Services (CMS), Center for Information Systems, Health Standards and Quality Bureau, (2003 data obtained in January 2004).

VNA: Visiting Nurse Associations are freestanding, voluntary, nonprofit organizations governed by a board of directors and usually financed by tax-deductible contributions as well as by earnings.

COMB: Combination agencies are combined government and voluntary agencies. These agencies are sometimes included with counts for VNAs.

PUB: Public agencies are government agencies operated by a state, county, city, or other unit of local government having a major responsibility for preventing disease and for community health education.

PROP: Proprietary agencies are freestanding, for-profit home care agencies.

PNP: Private not-for-profit agencies are freestanding and privately developed, governed, and owned nonprofit home care agencies. These agencies were not counted separately prior to 1980.

OTH: Other freestanding agencies that do not fit one of the categories for freestanding agencies listed above.

HOSP: Hospital-based agencies are operating units or departments of a hospital. Agencies that have working arrangements with a hospital, or perhaps are even owned by a hospital but operated as separate entities, are classified as freestanding agencies under one of the categories listed above.

REHAB: refers to agencies based in rehabilitation facilities.

SNF: Refers to agencies based in skilled nursing facilities.

decline in agencies since 1997 is the direct result of changes in Medicare home health reimbursement enacted as part of the Balanced Budget Act of 1997 (BBA) (P.L. 105-33).

b. Medicare-certified Hospices

Medicare added hospice benefits in October 1983, 10 years after the first hospice was established in the United States. Hospices provide palliative medical care and supportive social, emotional, and spiritual services to the terminally ill and their families. The number of Medicare-certified hospices has grown from 31 in January 1984 to 2,444 as of December 2003 (for a separate fact sheet with detailed

information on hospices, please contact the Hospice Association of America, 202/546-4759).

c. Non-Medicare-certified Agencies

Because of the differences in licensing and oversight from state to state, it is difficult to quantify the number of noncertified agencies in existence. The noncertified home care agencies, home care aide organizations, and hospices that remain outside Medicare do so for a variety of reasons. Some do not provide the types of services that Medicare covers. For example, home care aide organizations that do not provide skilled nursing care are not eligible to participate in Medicare.

**Table 2. Personal Health Care Expenditures, 2002 and 2003<sup>1</sup>**

	2002	2003 <sup>1</sup>
	(Measured by Percentage)	
<b>Total personal health care</b>	<b>100</b>	<b>100</b>
Hospital care	36	36
Physician and clinical services	25	25
Nursing home care <sup>2</sup>	8	7
Prescription drugs	12	13
Other professional services	3	3
Dental services	5	5
Home care <sup>b</sup>	3	3
Other personal health care	3	4
Other medical products	4	4

**Source:** Heffler, S., et al. "Health Spending Projections Through 2013." *Health Affairs* (Web Exclusive): February 11, 2004.

<sup>1</sup>Projected.

<sup>2</sup>Freestanding facilities only. Additional services of this type are provided in hospital-based facilities and counted as hospital care.

## 2. HOME CARE EXPENDITURES AND UTILIZATION

### a. National Expenditures

The Centers for Medicare & Medicaid Services (CMS – formerly HCFA) estimated the total national expenditure for health care at \$1,673.6 billion in 2003.<sup>3</sup> Health spending grew at an annual rate of 5.7 percent from 1994-2000, 7.3 percent in 2001, 9.3 percent in 2002, and is projected to grow 7.8 percent in 2003. Mean annual growth from 2003-2013 is projected at 7.3 percent. A slowdown in overall health spending growth in 2003 would follow six consecutive years of accelerating growth in both the private and public sectors. Among factors contributing to the slowdown for public spending are states' decisions to limit Medicaid spending in light of their fiscal problems and the expiration of some temporary increases in Medicare payments. For private spending, growth in health insurance spending per enrollee is projected to slow because of a modest deceleration in medical prices and use. The most recent employment, hours, and earnings data from the Bureau of Labor Statistics (BLS) show a modest slowdown in growth in health sector hourly wages and employment beginning in

2002 and continuing for 2003, implying slower medical price inflation and use. According to CMS authors, despite the projected slowdown in 2003, health spending growth is still anticipated to outpace the rebound in overall economic growth by three percentage points. As a result, the health sector's share of gross domestic product (GDP) is projected to increase to 15.3 percent in 2003, which would be the fifth consecutive year in which more of the nation's resources are allocated to health care. It should be noted that these projections were completed before the Medicare Prescription Drug, Improvement, and Modernization Act of 2003 (MMA—P.L. 108-173) was signed into law in December 2003.

The latest outlook indicates that private personal health care (PHC) spending growth peaked in 2002, increasing 8.4 percent in that year; PHC is projected to fall to 5.2 percent in 2003.<sup>4</sup>

Table 2 provides the 2002 and projected 2003 national expenditures for personal health care by type. Personal health care is a subset of total health spending and includes spending for health care goods and services used by individuals. Of the \$1,553.0 billion attributed to personal health care spending in 2002, approximately 61 percent was for hospital care and physician services and only a small fraction (approximately 3 percent) was spent on freestanding home care. Hospital-based home care is included with hospital expenditures.

Total home care spending is difficult to estimate due to limitations of data sources. HCFA (now Centers for Medicare & Medicaid Services – CMS) estimated total spending for home care as \$34.5 billion in 1997.<sup>5</sup> This figure rose to \$36.1 billion in 2002, rebounding from a low of \$31.7 billion in 2000. The decline in 2000 is largely the result of dramatic decreases in Medicare home health outlays. These estimates do not include spending for home care services that are not included in the national health accounts data, for example payments made by consumers to independent providers.

### b. Medicare Home Health

Medicare is the largest single payer of home health care services. In 2001, Medicare spending accounted for more than

based on the 2002 version of the National Health Expenditures (NHE) released in January 2004.<sup>6</sup>

**Table 3. Sources of Payment for Home Health Care, 2002 & 2003<sup>1</sup>**

Source of Payment	2002		2003	
	Amount (in \$ billions)	Percent of Total	Amount (in \$ billions)	Percent of Total
<b>Total</b>	<b>36.1</b>	<b>100.0</b>	<b>38.3</b>	<b>100.0</b>
Medicare	11.4	31.6	12.2	31.9
Medicaid <sup>2</sup>	4.8	13.3	5.1	13.3
State and local governments <sup>3</sup>	5.7	15.8	6.0	15.7
Private insurance	6.7	18.6	6.9	18.0
Out-of-pocket	6.5	18.0	6.9	18.0
Other	1.1	3.0	1.1	2.9

**Source:** Centers for Medicare & Medicaid Services, Office of the Actuary, National Health Care Expenditures: 1990-2012, [www.cms.gov](http://www.cms.gov), (February 2004).

**Notes:** <sup>1</sup>Data for 2003 is projected.

<sup>2</sup>Medicaid figures do not include expenditures for non-health services (i.e., personal support services, etc.) Represents only the federal share of Medicaid.

<sup>3</sup>State and local governments include state portion of Medicaid.

Percentages may not total to 100.0 due to rounding.

31 percent of total estimated home health expenditures (see Table 3), down from 41 percent in 1995. Other public funding sources for home health include Medicaid, the Older Americans Act, Title XX Social Services Block Grants, the Veterans' Administration and Civilian Health and Medical Program of the Uniformed Services (CHAMPUS). Private insurance comprised only a small portion of home health care payments. Only about 18 percent of home health services were financed through out-of-pocket payments. While Medicare pays the largest share for home health care, Medicaid outlays for in-home services (including personal care services that Medicare does not pay for) are actually greater. In February 2004, CMS projected that Medicare home health spending would grow 7.3 percent per year from 2002 to 2013 and would account for nearly 32 percent of total home health spending by 2013. Private spending was projected to fall from nearly 40 percent of home health spending in 2002 to about 37 percent in 2013. These spending projections are

About 40 percent of the projected \$294 billion Medicare benefit payments in fiscal year 2004 will go to hospitals, with 17 percent going to physician services. Hospice payments will account for approximately two percent of the total Medicare benefit payments in fiscal year 2004 (FY2004). (Table 4).

The home health benefit accounts for nearly four percent of total Medicare spending in FY2004. As recently as 1997, home health spending was nine percent of total Medicare benefit payments. Growth in the Medicare home health benefit between 1990 and 1996 can be attributed to specific legislative expansions of the benefit, court decisions, and to a number of socio-demographic trends that fostered growth in the program from the beginning.

Between fiscal years 1998 and 2000, Medicare home health spending fell from \$14 billion to \$9.2 billion, a 34 percent decrease. (Table 4) No other benefit in the Medicare program experienced proportionate reductions anywhere near the magnitude that home health experienced as a result of changes imposed by the Balanced Budget Act of 1997 (BBA). The BBA's interim payment system (IPS) introduced a new per beneficiary limit, designed to reduce growth in Medicare home health expenditures. In addition, to further reduce payments, the BBA required that reimbursement limits be held to a below-inflation rate of growth by excluding a two-year period from the home health inflation adjustment. Finally, agency payments under the IPS were restricted to the lowest of the agency's allowable costs, its per-visit cost limits, or its per-beneficiary cost limits. The Lewin Group estimated that 90 percent of agencies would have costs that exceed BBA limits in 1998 by an average of 32 percent without a change in home care practice patterns.<sup>7</sup>

Table 5 shows the changes in utilization and expenditures in the Medicare home health benefit that have occurred since 1994. An estimated 3.6 million Medicare enrollees received fee-for-service home health services in 1997, twice the number of home health recipients in 1990. Since 1997,

utilization of the home health benefit has decreased significantly.

Benefit Type	<u>1998</u>	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004<sup>1</sup></u>
	Amount (\$billions)						
Managed care	31.9	37.4	39.8	42.1	33.9	36.5	38.5
Inpatient hospitals	87.0	85.7	86.5	93.2	102.1	108.6	118.6
Skilled nursing facilities	13.6	11.5	10.6	12.4	14.7	14.5	15.7
Home health	14.0	9.4	9.2	9.3	10.0	10.1	10.5
Hospice	2.1	2.5	2.8	3.4	4.5	5.9	6.5
Physicians	32.3	33.4	36.0	40.4	44.2	47.3	51.1
Outpatient hospitals	10.5	8.5	8.4	10.1	12.8	14.7	15.9
Other	14.6	15.7	17.2	20.3	23.7	27.4	29.5
Durable medical equipment	4.1	4.3	4.6	5.3	6.2	7.6	7.8
<b>TOTAL Part A</b>	<b>134.3</b>	<b>129.3</b>	<b>126.2</b>	<b>136.0</b>	<b>144.1</b>	<b>153.1</b>	<b>166.2</b>
<b>TOTAL Part B</b>	<b>75.8</b>	<b>79.1</b>	<b>88.9</b>	<b>100.5</b>	<b>108.1</b>	<b>119.5</b>	<b>127.8</b>
<b>TOTAL MEDICARE</b>	<b>210.1</b>	<b>208.4</b>	<b>215.1</b>	<b>236.5</b>	<b>252.1</b>	<b>272.6</b>	<b>294.0</b>

  

Benefit Type	<u>1999</u>	<u>2000</u>	<u>2001</u>	<u>2002</u>	<u>2003</u>	<u>2004</u>
	Managed care	17.2	6.4	5.8	-19.5	7.7
Inpatient hospitals	-1.5	0.9	7.7	9.5	6.4	9.2
Skilled nursing facilities	-15.4	-7.8	17.0	18.5	-1.4	8.3
Home health	-32.9	-2.1	1.1	7.5	1.0	4.0
Hospice	19.1	12.0	21.4	32.4	31.1	10.2
Physicians	3.4	7.8	12.2	9.4	7.0	8.0
Outpatient hospitals	-19.1	-1.2	20.2	26.7	14.8	8.2
Other	7.5	9.6	18.0	16.7	15.6	7.7
Durable medical equipment	4.9	7.0	15.2	17.0	22.6	2.6

**Source:** Centers for Medicare & Medicaid Services, Office of the Actuary, Medicare & Medicaid Cost Estimates Group. (Fiscal Year 2004 data obtained in February 2004).  
**Notes:** <sup>1</sup>Fiscal Year 2004 numbers are estimated.

Year	Outlays (\$millions)	Visits (1000s)	Clients (1000s)	Payment/Client	Visits/Client
1994	\$12,676	208,759	3,197	\$3,977	66
1995	15,421	249,584	3,475	4,438	72
1996	16,789	264,553	3,598	4,666	74
1997	16,723	257,751	3,554	4,705	73
1998	10,446	154,992	3,062	3,412	51
1999	7,908	112,748	2,735	2,892	41
2000	7,352	90,730	2,497	2,945	36
2001	8,637	73,698	2,439	3,541	30
2002	9,635	78,055	2,724	3,538	29

**Source:** Centers for Medicare & Medicaid Services. HCIS home health data, 1994-1998 (December 2000). HCIS home health data, 1999 & 2000 (September 2001). HCIS home health data, 2001 (December 2002). HCIS home health data, 2002 (October 2003).

Advisory Commission (MedPAC) calculated a total reduction of 1.3 million beneficiaries during the time period. Visits per client and per client reimbursement have also declined since 1996 and remain below 1994 averages. Two studies conducted by researchers at George Washington University identified beneficiary access problems resulting from the BBA.<sup>8</sup> Studies conducted for the MedPAC and by the General Accounting Office (GAO—now the Government Accountability Office) also found access is a growing problem for patients who require intensive services.<sup>9</sup> In June 2003, MedPAC issued a report indicating that skilled nursing facility care is now

substituting for home health care for some patients, most likely at a much higher cost to Medicare.<sup>10</sup> CMS expects outlays for Medicare home health to remain below 1994 levels (\$12,521 million) through 2007.

notion behind the move from the modified fee-for-service payment system to a PPS is that by setting a national payment rate, providers will deliver care more efficiently. The findings of a final evaluation of HCFA's episode-based PPS demonstration identified a reduction in episode costs that was

**Table 6. Medicaid Expenditures, by Type of Service, Fiscal Years 1997-2000**

	Fiscal Year			
	1997	1998	1999	2000 <sup>3</sup>
	In \$billions			
<b>Total Vendor Payments</b>	\$124.4	\$142.3	\$153.5	\$168.3
Nursing facility services	30.5	31.9	33.3	34.4
Inpatient services	25.2	21.5	23.9	26.1
General hospitals	23.1	18.7	22.2	24.3
Mental hospitals	2.0	2.8	1.8	1.8
Other care	16.3	31.6	29.1	32.7
Intermediate care facility (MR) services <sup>1</sup>	9.8	9.5	9.3	9.4
Prescribed drugs	12.0	13.5	16.6	20.0
Home care services <sup>2</sup>	12.2	17.6	21.5	24.3
Physician services	7.0	6.1	6.6	6.8
Outpatient hospital services	6.2	5.8	6.1	7.1
Clinic services	4.3	3.9	5.8	6.2
Laboratory and radiological services	1.0	0.9	1.2	1.3
	Percent change from previous year			
	1998	1999	2000 <sup>3</sup>	
<b>Total Vendor Payments</b>	14.4	7.9	9.6	
Nursing facility services	4.6	4.4	3.3	
Inpatient services	-14.7	11.2	9.2	
General hospitals	-19.0	18.7	9.5	
Mental hospitals	40.0	-35.7	0.0	
Other care	93.9	-7.9	10.3	
Intermediate care facility (MR) services <sup>1</sup>	-3.1	-2.1	1.1	
Prescribed drugs	12.5	23.0	20.5	
Home care services <sup>2</sup>	44.3	22.2	13.0	
Physician services	-12.9	8.2	3.0	
Outpatient hospital services	-6.5	5.2	16.4	
Clinic services	-9.3	48.7	6.9	
Laboratory and radiological services	-10.0	33.3	8.3	

**Source:** Centers for Medicare & Medicaid Services, MSIS (formerly HCFA-2082) ([www.cms.gov](http://www.cms.gov)). (2000 data obtained September 2003).

**Notes:** <sup>1</sup>"MR" indicates facilities for persons with mental retardation.  
<sup>2</sup>For years 1998, 1999, and 2000, includes home health, personal support services, and home and community based waiver program. The 1997 figure represents home health only. All numbers represent combined federal and state spending.  
<sup>3</sup>Hawaii did not report for FY 2000. Their FY 1999 data are used in this table.

offset by an increase in per-visit costs when agencies were paid prospectively based on an episode of care.<sup>12</sup> The home health PPS relies on an 80-category case-mix adjuster to set payment rates based on determining patient characteristics including clinical severity, functional status and use of rehabilitative therapy services. The notion of a case-mix adjusted payment rate is similar to the Medicare skilled nursing facility and inpatient hospital prospective payment systems. Like its counterparts, the home health system also includes payments for unexpectedly high utilization cases through an outlier and adjusts payments for local labor market differences through an area wage index. However, a major difference among the systems is the unit of payment. Hospitals are paid by the stay, skilled nursing facilities are paid by the day. Under PPS, the unit of payment shifted from the home health visit to a 60-day episode.

c. Medicare Home Health Prospective Payment

The BBA mandated that HCFA develop a prospective payment system (PPS) for Medicare home health. HCFA implemented home health PPS on October 1, 2000.<sup>11</sup> The

d. Medicaid Home Care

Medicaid payments for home care are divided into three main categories: the traditional home health benefit that is a mandatory service provided by all states and two optional

programs-- the personal care option and home and community-based waivers. Together, these three home care services represent a relatively small but growing portion of total Medicaid payments. Table 6 shows that approximately 40 percent (\$61 billion) of the \$168 billion in Medicaid benefit payments in fiscal year 2000 (FY2000) were for hospital care and institutional services. Home care services comprised 14.4 percent of the payments. Hospice is an optional Medicaid service that is currently offered by 46 states. Payments for hospice services were estimated at \$345 million in FY99.

Table 7 shows the growth in the Medicaid home care outlays since FY75. Between FY96 and FY97, expenditures

**Table 7. Medicaid Home Care Expenditures and Recipients, for Selected Years, 1975-2000**

Fiscal Year	Vendor Payments (\$millions)	Recipients (1000s)
1975	70	343
1980	332	392
1985	1,120	535
1990	3,404	719
1991	4,101	812
1992	4,888	926
1993	5,601	1,067
1994	7,049	1,376
1995	9,406	1,639
1996	10,583	1,633
1997	12,237	1,861
1998	17,600	4,800
1999	21,500	4,882
2000 <sup>1</sup>	24,300	5,544

**Source:** Centers for Medicare & Medicaid Services, MSIS (formerly HCFA-2082). ([www.cms.gov](http://www.cms.gov)). (2000 data obtained September 2003).

**Note:** <sup>1</sup>Hawaii did not report for FY 2000. Their FY 1999 data are used in this table.

Figures include expenditures for home health and personal support services. Figures for 1999 and 2000 also include home and community-based waiver program.

increased from \$10.6 billion to \$12.2 billion, an increase of 15.6 percent. Medicaid home care expenditures increased an additional 44.3 percent between FY97 and FY98, bringing total payments to \$17.6 billion.

Changes in the reporting of Medicaid expenditures make it difficult to pinpoint the amount or reason for what appears to be a dramatic increase.

#### e. Managed Care

Health care services in the United States are increasingly financed through managed care organizations. A managed care organization, including health maintenance organizations (HMOs), typically finances health care services through a negotiated prepaid rate to health care providers. A fully capitated contract specifies a lump sum payment per enrollee to cover all care provided through the plan, but there are many variations. In contrast, traditional health insurance pays providers based on the number of services delivered with fewer limitations on which providers would be paid, a payment arrangement commonly termed fee-for-service.

Managed care is most prevalent in the employer-based health insurance market. Ninety-five percent of workers with health insurance received health insurance through a managed care plan in 2002.<sup>13</sup> Managed care enrollment has increased among Medicaid enrollees as states seek federal waivers to convert their Medicaid programs to managed care programs. As of December 31, 2002, 57.4 percent of all Medicaid beneficiaries were enrolled in managed care.<sup>14</sup> Medicare managed care has increased at a slower pace. As of September 2003, about 14 percent of Medicare beneficiaries were enrolled in Medicare+Choice.<sup>15</sup>

The increasingly competitive health care market has created incentives for home care agencies to enter managed care provider networks. However, little is known about the extent to which home care agencies have entered into managed care arrangements. A preliminary (and somewhat dated) study conducted for HCFA compared patient outcomes and total expenditures for Medicare home health clients who received services through Medicare managed care and a group who received services through fee-for-service Medicare home health. The authors found the managed care clients used less home health resources but also had less favorable outcomes on average than their Medicare fee-for-service counterparts,

suggesting the need for further research on the relationship between volume of home care services and outcomes.<sup>16</sup>

**Table 8. Number and Percent of Home Health Discharges by Age, Gender, Race, and Marital Status, 2000**

Characteristic	Number	Percent of Total	Characteristic	Number	Percent of Total
<b>TOTAL</b>	<b>7,178,964</b>	<b>100.0%</b>	<b>TOTAL</b>	<b>7,178,964</b>	<b>100.0%</b>
<u>Age in years:</u>			<u>Marital Status</u>		
< 6 years	224,692	3.1	Under age 65:		
6-17	75,144	1.0	Married	1,006,349	14.0
18-44	741,386	10.3	Widowed	98,859	1.4
45-64	1,175,637	16.4	Divorced or separated	179,819	2.5
65+	4,962,108	69.1	Single or never married	430,347	6.0
85+	1,219,997	17.0	Unknown	201,647	2.8
<u>Gender</u>			<u>Age 65+:</u>		
Under age 65:			Married	1,887,719	26.3
Male	910,206	12.7	Widowed	2,021,922	28.2
Female	1,306,652	18.2	Divorced or separated	196,876	2.7
Age 65+			Single or never married	377,283	5.3
Male	1,687,132	23.5	Unknown	478,303	6.7
Female	3,274,976	45.6			
<u>Race/Ethnicity</u>			<u>MSA or Non-MSA</u>		
Under age 65:			Under age 65:		
Hispanic	140,873	2.0	MSA	1,873,398	26.1
Black	250,864	3.5	Non-MSA	343,456	4.8
White and other	2,052,306	28.6	Age 65+:		
Age 65+			MSA	4,207,557	58.6
Hispanic	152,191	2.1	Non-MSA	754,548	10.5
Black	465,559	6.5			
White and other	4,428,111	61.7			

**Source:** US Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Health Statistics, *2000 National Home and Hospice Care Survey*, CD-ROM Series 13, No. 31 (July 2002).  
**Note:** Percentages may not add to totals due to rounding.

### 3. HOME CARE RECIPIENTS

The *2000 Home and Hospice Care Survey* findings indicate that 7.2 million individuals received formal home care services in 2000, a decrease of 5.8 percent from 1998. (Table 8)<sup>17</sup> This figure represents roughly 2.5 percent of the US Bureau of Census estimated US population as of July 1, 2000.

Of these recipients, 69.1 percent were over age 65 and 63.8 percent were women. Much of this reduction can be attributed to a reduction in patients served under Medicare.

Table 9 shows that 31.4 percent of Medicare home health patients in 1999 had conditions related to diseases of the circulatory system as their principal diagnosis. People with heart disease, including congestive heart failure, made up over

half of this group. Injury and poisoning, diseases of the musculoskeletal system and connective tissue, and diseases of the respiratory system were also frequent principal diagnoses

for Medicare home health patients. Medicare home health patients with neoplasms comprised 7.0 percent of all the

**Table 9. Medicare Home Health Utilization by Principal Diagnosis, 1999**

Principal ICD-9-CM Diagnosis <sup>1</sup>	Principal ICD-9-CM Codes	Persons Served	
		Number in Thousands	Percent
Total, All Diagnoses <sup>2</sup>	---	2,720	100.0
Total Leading Diagnoses <sup>3</sup>	---	2,159	79.4
Infectious and Parasitic Diseases	001-139	30	1.1
Neoplasms	140-239	190	7.0
Malignant Neoplasm of Trachea, Bronchus, and Lung	162	28	1.0
Endocrine, Nutritional, and Metabolic Diseases and Immunity Disorders	240-279	232	8.5
Diabetes Mellitus	250	172	6.3
Diseases of the Blood and Blood Forming Organs	280-289	85	3.1
Mental Disorders	290-319	73	2.7
Diseases of the Nervous System and Sense Organs	320-389	90	3.3
Diseases of the Circulatory System	390-459	855	31.4
Essential Hypertension	401	122	4.5
Heart Disease	402, 410-411, 413-414, 427-428	463	16.0
Diseases of the Respiratory System	460-519	315	11.6
Pneumonia, Organism Unspecified	486	101	3.7
Diseases of the Digestive System	520-579	141	5.2
Diseases of the Genitourinary System	580-629	126	4.6
Diseases of the Skin and Subcutaneous Tissue	680-709	200	7.4
Diseases of the Musculoskeletal System and Connective Tissue	710-739	383	14.1
Osteoarthritis and Allied Disorders	715	171	6.3
Symptoms, Signs, and Ill-Defined Conditions	780-799	282	10.4
Injury and Poisoning	800-999	432	15.9
Supplementary Classification	V01-V82	28	1.0

<sup>1</sup>ICD-9-CM is International Classification of Diseases, 9<sup>th</sup> Revision, Clinical Modification (Volume 1). Only the first-listed or principal diagnosis has been used.  
<sup>2</sup>Includes invalid codes not listed separately.  
<sup>3</sup>Specific leading diagnostic categories were selected for presentation because of frequency of occurrences or because of special interest.  
**Source:** Centers for Medicare & Medicaid Services, Office of Information Services: Data from the Medicare Decision Support Access Facility; data development by the Office of Research, Development, and Information. *Health Care Financing Review: Medicare and Medicaid Statistical Supplement. 2001.*

program's home health admissions; diabetes accounted for 6.3 percent.

Many hospital patients are discharged to home care services for continued rehabilitative care. As hospital stays shortened beginning in the early 1980s, the percentage of Medicare patients discharged to home health care increased from 9.1 percent in 1981 to 17.9 percent in 1985. The

Medicare Payment Advisory Commission (MedPAC) estimated that among seven selected diagnosis related groups (DRG), an average of 12.1 percent of Medicare hospital patients used home health care following discharge in FY2001.<sup>18</sup> Table 10 shows the percentage of Medicare beneficiaries discharged from an acute care hospital to home

health care by selected DRGs. (Medicare’s hospital inpatient PPS pays hospitals a predetermined amount per hospital discharge. The diagnosis related group – DRG – classification

system assigns patients to over 500 groups, distinguishing cases with similar clinical problems that are expected to

**Table 10. Percentage of Medicare Beneficiaries Discharged to Home Health Care by Top Diagnosis Related Groups (DRGs), 1997-2001**

<b>Initial Hospital DRG</b>	<b>1997</b>	<b>1998</b>	<b>1999</b>	<b>2000</b>	<b>2001</b>	<b>1997-2001 Difference</b>
106 – Coronary bypass with PTCA <sup>1</sup>	2.5%	2.3%	0.1%	0.1%	0.1%	-2.4
079 – Respiratory infections and inflammations	1.7	1.3	1.2	1.1	1.0	-0.8
014 – Specific cerebrovascular disorders	3.3	2.9	2.8	2.7	2.7	-0.6
148 – Major small and large bowel procedures	2.1	2.0	1.8	1.8	1.8	-0.3
088 – Chronic obstructive pulmonary disease	4.2	4.9	5.1	4.6	4.1	-0.1
121 – Circulatory disorders w/acute myocardial infarction & major complications	1.8	1.7	1.8	1.7	1.7	-0.1
089 – Simple pneumonia and pleurisy	4.9	6.1	6.5	6.2	4.9	0.0
127 – Heart failure and shock	6.7	6.9	6.8	6.7	6.8	0.1
296 – Nutritional and misc. metabolic disorders	1.5	1.5	1.6	1.7	1.6	0.1
107 – Coronary bypass with cardiac catheterization <sup>2</sup>	1.6	1.5	2.1	2.1	2.1	0.5
209 – Major joint and limb reattachment procedures of lower extremity	4.5	4.5	4.4	4.4	5.2	0.7
116 – Other permanent cardiac pacemaker implant or PTCA with coronary artery stent implant*	0.8	1.6	1.6	1.7	1.7	1.0
462 – Rehabilitation	7.1	6.9	7.8	8.5	9.1	2.0

**Source:** Department of Health and Human Services, Office of Inspector General. *Access to Home Health Care After Hospital Discharge 2001*. #OEI-02-01-00180. July 2001.

**Notes:** <sup>1</sup>In 1998, the CMS reclassified DRG 107 as DRG 106, coronary bypass with cardiac catheterization. DRG 109 was classified as coronary bypass without catheterization, formerly DRG 107. DRG 106 was classified as coronary bypass with PTCA.

<sup>2</sup>Under DRG 116, PTCA with coronary artery stent implant replaced AICD lead or generator procedure. (Differences may be due to rounding. )

require similar amounts of hospital resources. The DRG-based payment for each discharge includes separately determined amounts for operating and capital costs.<sup>19)</sup>

A study performed by the Department of Health and Human Services, Office of Inspector General found that 38 percent of Medicare beneficiaries who began use of home health care in the year 2000 came directly from the community, with no prior hospital (48 percent) or nursing home (14 percent) stay within 15 days of receiving home health care.<sup>20)</sup> Table 11 shows the top five diagnoses for Medicare community home health beneficiaries. Diagnosis is indicated by ICD-9 code (International Classification of Diseases).

4. CAREGIVERS

**Table 11. Ranking of Highest Volume Diagnoses for “Community Beneficiaries” by Year, 1997-2000**

<b>Primary ICD9 Diagnosis</b>	<b>Percent (rank) 1997</b>	<b>Percent (rank) 1998</b>	<b>Percent (rank) 1999</b>	<b>Percent (rank) 2000</b>
250 – Diabetes	8.6 (1)	7.6 (1)	6.9 (1)	6.2 (1)
401 – Essential hypertension	7.7 (2)	6.2 (2)	5.5 (3)	5.3 (3)
428 – Heart failure	5.3 (3)	5.0 (3)	4.7 (4)	4.6 (4)
707 – Chronic ulcer of the skin	3.6 (4)	4.6 (4)	5.7 (2)	5.6 (2)
715 – Osteoarthritis	3.2 (5)	3.3 (5)	3.2 (5)	3.6 (5)

**Source:** Department of Health and Human Services, Office of Inspector General. *Medicare Home Health Care Community Beneficiaries 2001*,. #OEI-02-01-00070. October 2001.

a. Informal Caregivers

The 2004 *Caregiving in the U.S.* survey, sponsored by the National Alliance for Caregiving and AARP, documented the prevalence of caregiving in the U.S. The study found that more than one in five (21 percent or 22.9 million) U.S. households (an estimated 44.4 million caregivers over age 18) was

**Table 12. Number of Home Health Care Workers, 2002, and Medicare-certified Agency FTEs, 2003**

Type of Employee	Number of Employees <sup>1</sup>	Number of Medicare FTEs <sup>2</sup>
RNs	111,324	97,940
LPNs	48,542	34,751
Physical Therapy Staff	13,514	16,693
Home Care Aides	317,888	53,332
Occupational Therapists	5,178	4,417
Social Workers	6,471	4,598
Other	172,183	42,983
Totals	675,100	254,714

**Sources:** <sup>1</sup> U.S. Department of Labor, Bureau of Labor Statistics, National Industry-Occupational Employment Matrix, data for 2002. Excludes hospital-based and public agencies. (February 2004)

<sup>2</sup> Unpublished data on FTEs in Medicare-certified home health agencies for calendar year (CY) 2003 from the Centers for Medicare & Medicaid Services HCFA Center for Information Systems, Health Standards and Quality Bureau. (February 2004)

involved in helping care for a person older than age 18. This report also showed that 62 percent of caregivers are married and nearly two-thirds (61 percent) are women. The typical caregiver is a 46 year old woman with at least some college experience who provides more than 20 hours of care each week to her mother.<sup>21</sup>

b. Formal Caregivers

Formal caregivers include professionals and paraprofessionals who provide inhome health care and personal care services, and are compensated for the services they provide. BLS and CMS provide data on these employees. However, agency definitions and methods of counting are different. BLS provides an occupational classification for “home health care services,” which excludes hospital-based and public agency workers. Its method of counting is “number

of employees.” CMS limits its statistics to employees of certified home health agencies. Furthermore, its survey presents data on full-time equivalents (FTEs).

In Table 12, BLS estimated that 675,100 persons were employed in home health care agencies in 2002, with the exclusions described above. CMS recorded 254,714 FTEs employed in Medicare-certified agencies as of December 2003, gaining 2,038 FTEs since December 2002. The CMS FTE counts reflect a decline of 156,394 FTEs since December 1997. For both BLS and CMS, the largest numbers of employees/FTEs are home care aides and RNs. In terms of FTEs, home care aides realized a 35 percent decrease from 1998 to 2002.

The 2002 number of employees data by job category presented in Table 12 is based on the Current Population Survey, which is conducted every three years. BLS also

**Table 13. Home Health Care Services: Total Employment, 1993-2001**

<u>Year</u>	<u>Total Number of Employees</u>
1993	510,000
1994	596,000
1995	656,000
1996	695,000
1997	707,000
1998	639,000
1999	639,000
2000	633,000
2001	641,000
2002	657,000

**Source:** U.S. Department of Labor, Bureau of Labor Statistics: Establishment Data. 2001, [www.bls.gov](http://www.bls.gov) (May 2003).

**Note:** Excludes hospital-based and public home care agency employees. Numbers are as of December of the corresponding year.

collects monthly information on employment for all workers, which includes home care services. BLS monthly statistics present data at an aggregate level combining all job titles. Table 13 shows the calendar year home care services employment for 1993-2002, based on BLS monthly statistics for December (the 2000 employment data cited in Table 12

are based on mid-year estimates). During the period 1993-1997, home care employment grew from 510,000 employees to 707,000 employees—an 8.7 percent average annual rate of growth. Between 1997 and 2000, total home care employment declined by more than 10 percent.

**Table 14. Home Health Care Visit Staff Productivity per 8-Hour Day (Actual Visits Performed)**

Registered Nurse	4.95
Licensed Practical Nurse/Licensed Vocational Nurse	6.02
Home Care Aide	5.17
Physical Therapist	5.50
Occupational Therapist	5.30
Social Worker	3.35

**Source:** National Association for Home Care & Hospice, Hospital & Healthcare Compensation Service. *Homecare Salary & Benefits Report 2003-2004*. October 2003.

c. Productivity

Since 1996, NAHC has worked with the Hospital and Healthcare Compensation Service (HCS) to conduct an annual survey of compensation in the home care and hospice industry. This agreement avoids duplication of effort in data collection by combining the efforts of both organizations. Employee productivity data is now collected in this survey. Productivity in home care is typically based on the average number of visits provided per day.

Table 14 shows data from the *Homecare Salary & Benefits Report 2003-2004*.

d. Compensation

Summary home care and hospice compensation results for the above-mentioned 2003-2004 HCS survey are shown in Tables 15 and 16. As in past surveys, compensation is reported for the median salary, rather than mean salary, to reduce the likelihood that very high or very low salaries would skew results. The survey includes data from agencies

with revenues of up to \$15 million. HCS publishes a separate report for agencies and chain organizations with revenues in excess of \$15 million.

**Table 15. Average Compensation of Home Health Agency Executives, October 2003**

	Salary Range by Percentile		
	25 <sup>th</sup>	Median	75 <sup>th</sup>
Executive Director/CEO	\$65,800	\$80,000	\$105,165
Chief Operating Officer/Program Director	57,753	70,000	82,784
Top Level Financial Executive	61,928	75,000	94,037
Director of Nurses/Clinical Services	52,825	58,000	67,746
Director of Social Work and Counseling	44,970	51,883	60,000
Utilization Review/Quality Assurance Manager	48,598	56,200	62,894

**Source:** National Association for Home Care & Hospice, Hospital & Healthcare Compensation Service. *Homecare Salary & Benefits Report 2003-2004*. October 2003.

5. COST EFFECTIVENESS

Home care is a cost-effective service, not only for individuals recuperating from a hospital stay but also for those who, because of a functional or cognitive disability, are unable to take care of themselves. Table 17 compares the average

**Table 16. Average Compensation of Home Health Agency Caregivers, October 2003**

	Per-Hour Rates by Percentile			Per-Visit Rates by Percentile		
	25 <sup>th</sup>	Median	75 <sup>th</sup>	25 <sup>th</sup>	Median	75 <sup>th</sup>
Registered Nurse	\$19.95	\$21.81	\$24.04	\$30.00	\$33.00	\$38.38
Licensed Practical Nurse/LVN	14.50	16.00	17.87	20.00	25.00	30.00
Occupational Therapist	23.16	25.52	28.15	43.00	45.00	50.00
Physical Therapist	25.63	27.50	30.00	44.00	47.50	50.85
Respiratory Therapist	17.00	18.33	19.64	31.00	37.50	40.00
Speech/Language Pathologist	22.50	25.00	28.17	45.00	47.00	50.00
Medical Social Worker	17.85	19.88	22.57	42.00	46.00	50.00
Home Care Aide III	9.04	10.01	11.05	12.27	15.00	16.25

**Source:** National Association for Home Care & Hospice, Hospital & Healthcare Compensation Service. *Homecare Salary & Benefits Report 2003-2004*. October 2003.

Medicare charges on a per day basis for hospital and skilled nursing facility (SNF) to the average Medicare charge for a home health visit. The following section lists some examples of cost-effective home care. However, it should be noted that cost-effectiveness is not the only rationale for home care. In fact, the best argument for home care is that it is a humane and compassionate way to deliver health care and supportive services. Home care reinforces and supplements the care provided by family members and friends and maintains the recipient's dignity and independence, qualities that are all too often lost even in the best institutions. Further, home care allows patients to take an active role in their care, becoming members of a multidisciplinary health care team.<sup>22</sup>

**Table 17. Comparison of Hospital, SNF, and Home Health Medicare Charges, 2001-2003**

	<u>2001</u>	<u>2002<sup>1</sup></u>	<u>2003<sup>2</sup></u>
Hospital charges per day	\$3,080	\$3,574	\$3,838
Skilled nursing facility charges per day	463	476	499
Home health charges per visit	105	108	109

**Sources:** The hospital and SNF Medicare charge data are from the *Annual Statistical Supplement, 2003, to the Social Security Bulletin*, Social Security Administration online (July 2004). Home health information based on 1999 data from CMS, Office of Information Services: Data from the Medicare Decision Support Access Facility; data development by the Office of Research, Development, and Information. Home Health per visit charges for all years shown are calculated using home health care services producer price index data from the Bureau of Labor Statistics online ([www.bls.gov](http://www.bls.gov)): November 2003.

**Note:** <sup>1</sup>Hospital and skilled nursing facility charges per day are based on preliminary data.  
<sup>2</sup>Hospital and skilled nursing facility charges per day for 2003 are based on preliminary 2002 data, updated by applying the producer price index for each industry

Several research studies conducted in the past several years have compared inpatient care to home care costs for a specific group of patients. An analysis of studies that investigated the use of home care as a cost-effective substitute for acute care services found a statistically significant relationship between home health use and reduced use of inpatient hospital care.<sup>23</sup> The cost savings data for six studies of home care cost-effectiveness are summarized in Table 18.

The information has been aggregated at a monthly level for purposes of comparison.

Several additional studies of home care cost effectiveness are summarized in the following paragraphs.

a. Psychiatric Care

An inhome crisis intervention program developed for psychiatric patients in Connecticut was effective in reducing hospital admissions, lengths of stay, and readmissions. A two-year analysis of more than 600 patients showed that 80.7 percent of patients referred for hospital care could be treated at home instead. When inpatient admissions were necessary, the average length of stay was reduced from 11.97 days to 7.48 days by adding elements of the inhome care program; and patients who received home care services were less likely to be readmitted for hospital care (11.8 percent of home care patients were readmitted compared to 45.9 percent of patients who did not receive home care services).<sup>24</sup>

b. Terminally Ill Veterans

A home care program for terminally ill veterans reduced hospital per capita costs by \$971. In the six-month study, patients receiving home care used 5.9 fewer hospital days than those in the control group. No differences were found in patient survival, activities of daily living, cognitive functioning, or morale. However, patient and caregiver satisfaction with care was significantly better among the patients receiving home care.<sup>25</sup>

c. Patients with COPD

An innovative home care program for patients with chronic obstructive pulmonary disease (COPD) that was tested in Connecticut found significant cost savings. The overall goal of the program was to provide more comprehensive home care services to COPD patients who previously required frequent hospitalizations. Monthly costs for hospitalizations, emergency room visits and home care fell from \$2,836 per patient before the intervention to \$2,508 per patient--a net savings of \$328 per patient per month.<sup>26</sup>

d. Patients with Congestive Heart Failure

The impact of intensive home care monitoring on the morbidity rates of elderly patients with congestive heart failure

was the focus of another study. The study found that with intensive home care surveillance, the total hospitalization rate dropped from 3.2 admissions per year to 1.2 admissions per year and the length of stay decreased from 26 days per year to

six days per year. Cardiovascular admissions declined from 2.9 admissions per year to 0.8 admissions per year and length of stay decreased from 23 days per year to four days per year. An inhome program also resulted in significant functional status improvement in elderly patients with congestive heart failure.<sup>27</sup>

**Table 18. Cost of Inpatient Care Compared to Home Care, Selected Conditions**

<u>Conditions</u>	<u>Per-patient Per-month Hospital Costs</u>	<u>Per-patient Per-month Home Care Costs</u>	<u>Per-patient Per-month Dollar Savings</u>
Low birth weight <sup>1</sup>	\$26,190	\$330	\$25,860
Ventilator-dependent adults <sup>2</sup>	21,570	7,050	14,520
Oxygen-dependent children <sup>3</sup>	12,090	5,250	6,840
Chemotherapy for children with cancer <sup>4</sup>	68,870	55,950	13,920
Congestive heart failure among the elderly <sup>5</sup>	1,758	1,605	153
Intravenous antibiotic therapy for cellulitis, Osteomyelitis, others <sup>6</sup>	12,510	4,650	7,860

**Sources:** <sup>1</sup>Casiro, O.G., McKenzie, M.E., McFayden, L., Shapiro, C., Seshia M.M.K., MacDonald, N., Moffat, M., and Cheang, M.S. "Earlier Discharge with Community-based Intervention for Low Birth Weight Infants: A Randomized Trial." *Pediatrics* 92, no. 1 (1993): 128-134.

<sup>2</sup>Bach, J.R., Intinola, P., Alba, A.S., and Holland, I.E. "The Ventilator-assisted Individual: Cost Analysis of Institutionalization vs. Rehabilitation and In-home Management." *Chest* 101, no. 1 (1992): 26-30.

<sup>3</sup>Field, A.I., Rosenblatt, A., Pollack, M.M., and Kaufman, J. "Home Care Cost-Effectiveness for Respiratory Technology-dependent Children." *American Journal of Diseases of Children* 145 (1991): 729-733.

<sup>4</sup>Close, P., Burkey, E., Kazak, A., Danz, P., and Lange, B. "A Prospective Controlled Evaluation of Home Chemotherapy for Children with Cancer." *Pediatrics* 95, no. 6 (1995): 896-900. (**Note:** The study found that the daily charges for chemotherapy were \$2,329±\$627 in the hospital and \$1,865±\$833 at home. These charges were multiplied by 30 days reflecting the above per-patient per-month costs.)

<sup>5</sup>Rich, M.W., Beckham, V., Wittenberg, C., Leven, C., Freedland, K., and Carney, R.M. "A Multidisciplinary Intervention to Prevent the Readmission of Elderly Patients with Congestive Heart Failure." *The New England Journal of Medicine* 333, no. 18 (1995): 1190-1195.

<sup>6</sup>William, D.N., et al. "Safety, Efficacy, and Cost Savings in an Outpatient Intravenous Antibiotic Program." *Clinical Therapy* 15 (1993): 169-179, cited in Williams, D., "Reducing Costs and Hospital Stay for Pneumonia with Home Intravenous Cefotaxime Treatment: Results with a Computerized Ambulatory Drug Delivery System." *The American Journal of Medicine* 97, no. 2A (1994): 50-55. (**Note:** The estimated hospital cost/day/patient is \$417 and the estimated savings/day/patient is \$262. These costs were multiplied by 30 days, reflecting the above per-patient per-month costs.)

<sup>1</sup> Centers for Medicare & Medicaid Services, Office of the Actuary (February 2004).

<sup>2</sup> The U.S. Department of Census estimated there were 19,690 home health care service establishments in 1997. The Census Bureau's definition of home health includes only those firms that provide skilled nursing services, exclusively or in

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combination with other home health services. Health and Social Assistance: Geographic Area Series, U.S. Census Bureau, 1997 Economic Census (May 15, 2001).

<sup>3</sup> Heffler S., S. Smith, G. Won, M. Clemens, et al. "Health Spending Projections Through 2013" *Health Affairs*, Web Exclusive, W4-79 (February 11, 2004).

<sup>4</sup> "National Health Expenditures Projections: 2003-2013," Centers for Medicare & Medicaid Services online, [www.cms.gov](http://www.cms.gov). (February 6, 2004).

<sup>5</sup> Health Care Financing Administration (now CMS) online data, published March 2001.

<sup>6</sup> "National Health Expenditures Projections: 2003-2013," Centers for Medicare & Medicaid Services online, [www.cms.gov](http://www.cms.gov). (February 12, 2004).

<sup>7</sup> The Lewin Group, "An Impact Analysis for Home Health Agencies of the Medicare Home Health Interim Payment System of the 1997 Balanced Budget Act." Washington, DC: National Association for Home Care (August 11, 1999).

<sup>8</sup> Smith B.M., K.A. Maloy, and D.J. Hawkins, "An Examination of Medicare Home Health Services: A Descriptive Study of the Effects of the Balanced Budget Act Interim Payment System on Access to and Quality of Care," Washington, DC: George Washington University Center for Health Services Research & Policy. (September 1999), and B.M. Smith, K.A. Maloy, and D.J. Hawkins, "An Examination of Medicare Home Health Services: A Descriptive Study of the Effects of The Balanced Budget Act Interim Payment System on Hospital Discharge Planning," Washington, DC: George Washington University Center for Health Services Research & Policy. (January 2000).

<sup>9</sup> Abt Associates, Inc. *Survey of Home Health Agencies*, No. 99-2. Cambridge (MA): Author. Report to the Medicare Payment Advisory Commission under contract. (September 1999), and General Accounting Office. *Medicare Home Health Agencies: Closures Continue, With Little Evidence Beneficiary Access Is Impaired*. No. HEHS-99-120. Washington: Author. (May 1999).

<sup>10</sup> Medicare Payment Advisory Commission, *Report to the Congress: Variation and Innovation in Medicare* (June 2003).

<sup>11</sup> "Medicare Program; Prospective Payment System for Home Health Agencies; Final Rule," *Federal Register*, vol. 65, no. 128, July 3, 2000. Pp. 41128-41214.

<sup>12</sup> Cheh V., "The Final Evaluation Report on the National Home Health Prospective Payment Demonstration: Agencies Reduce Visits While Preserving Quality," Princeton, NJ: Mathematica Policy Research, Inc. (April 30, 2001).

<sup>13</sup> Gabel J., L. Levitt, J. Pickreign, et al. "Job-Based Health Benefits in 2002: Some Important Trends," *Health Affairs*, vol. 21, no. 5. (September/October 2002).

<sup>14</sup> Centers for Medicare & Medicaid Services, "Medicaid Managed Care Penetration Rates by State – December 31, 2002," [www.cms.gov/medicaid/managedcare/mmcpr02.pdf](http://www.cms.gov/medicaid/managedcare/mmcpr02.pdf). (June 2003).

<sup>15</sup> Centers for Medicare & Medicaid Services online, [www.cms.gov](http://www.cms.gov) (October 28, 2003).

<sup>16</sup> Shaughnessy P.W., R.E. Schlenker, D.F. Hittle, et al., *A Study of Home Health Care Quality and Cost Under Capitated and Fee-For-Service Payment Systems, Vol. 1: Summary* (Denver: Center for Health Policy Research 1994).

<sup>17</sup> US Department of Health and Human Services, Centers for Disease Control and Prevention, National Center for Health Statistics, *2000 National Home and Hospice Care Survey*, CD-ROM Series 13, No. 31. July 2002.

<sup>18</sup> Medicare Payment Advisory Commission, *Report to the Congress: Variation and Innovation in Medicare* (June 2003).

<sup>19</sup> Medicare Payment Advisory Commission, *Report to the Congress: New Approaches in Medicare* (June 2004).

<sup>20</sup> Department of Health and Human Services, Office of Inspector General, *Home Health Community Beneficiaries 2001*, October 2001, #OEI-02-01-00070.

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- <sup>21</sup> The Henry J. Kaiser Family Foundation. "The Wide Circle of Caregiving," June 2002 ([www.kff.org](http://www.kff.org)).
- <sup>22</sup> Sheldon P. and M. Bender. "High-Technology in Home Care." *Community Health Nursing and Home Health Nursing*, no. 3 (1994): 507-519.
- <sup>23</sup> Hughes S.L., A. Ulasevich, F.M. Weaver, et al. "Impact of Home Care on Hospital Days: A Meta Analysis," *Health Services Research* no. 4 (1997): 415-532.
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