

# medicaid and the uninsured

# Changes in Characteristics, Needs, and Payment for Care of Elderly

**Nursing Home Residents: 1999 to 2004** 

Prepared by

Judith Kasper, PhD Johns Hopkins University

and

Molly O'Malley Kaiser Commission on Medicaid and the Uninsured

June 2007



# kaiser commission medicaid and the uninsured

The Kaiser Commission on Medicaid and the Uninsured provides information and analysis on health care coverage and access for the low-income population, with a special focus on Medicaid's role and coverage of the uninsured. Begun in 1991 and based in the Kaiser Family Foundation's Washington, DC office, the Commission is the largest operating program of the Foundation. The Commission's work is conducted by Foundation staff under the guidance of a bipartisan group of national leaders and experts in health care and public policy.

James R. Tallon

Chairman

Diane Rowland, Sc.D.

Executive Director



# Changes in Characteristics, Needs, and Payment for Care of Elderly

**Nursing Home Residents: 1999 to 2004** 

## Prepared by

Judith Kasper, PhD Johns Hopkins University

and

Molly O'Malley Kaiser Commission on Medicaid and the Uninsured

June 2007



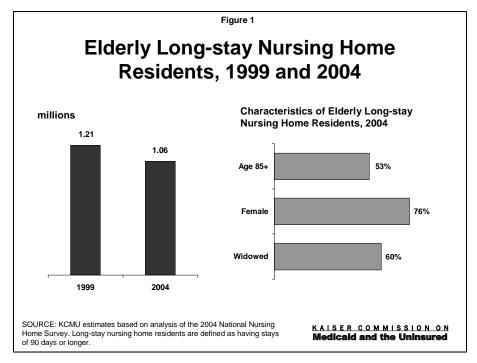
### **EXECUTIVE SUMMARY**

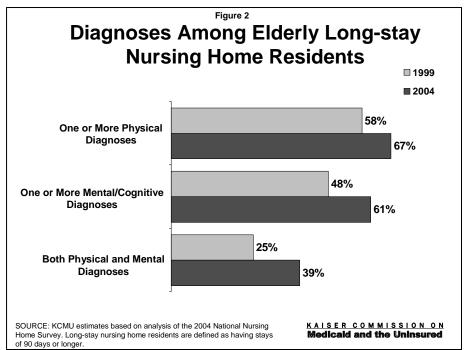
The proportion of elderly adults over age 65 in nursing homes has declined over the past two decades, most noticeably in recent years. Reasons suggested for this trend include reductions in disability rates among elderly people, improvements in mechanisms for coping with disability, and changes in the residential and long-term care options available to elderly people with disabilities. This paper focuses on the characteristics, needs, and payment sources for care, of elderly nursing home residents, and changes in these as the size of the resident population has declined between 1999 and 2004.

### Findings:

The number of elderly long-stay nursing home residents (90 days or longer) declined from 1.21 million to 1.06 million between 1999 and 2004, while the demographic profile of these residents changed little during the time period. On any given day four-fifths of elderly people in nursing homes are long-stay residents (90 days or longer) and just over half can be considered permanent residents (1 year or longer). The typical long-stay resident is over age 85 (53%), female (76%) and widowed (60%) (Figure 1).

Disease prevalence was higher, and multiple conditions were more common, among elderly nursing home residents in 2004 compared to 1999 indicating an increasingly sicker population. Over two-thirds of long-stay residents had multiple physical conditions, and close to two-fifths had both physical and mental/cognitive conditions, up from a quarter in 1999 (Figure 2). The percentage of long-stay residents who received help from another person in 5 ADLs increased from 26% in 1999 to 34% in 2004, but doubles to 54% if supervision is considered as well as hands-on assistance. A high percentage of these residents do not walk (41%) and only 18% walk independently without help or supervision.





Medicaid is the main payer for elderly long-stay residents, accounting for 68% of these residents in 2004. The absolute number of long-stay Medicaid residents declined between 1999 and 2004 from 808,000 to 731,000 and became sicker overtime, mirroring the overall long-stay nursing home population. Although the number of elderly Medicaid

beneficiaries grew over this period, data from the Medicare Current Beneficiary Survey (calendar years 1999 and 2003) also shows the proportion residing in nursing homes declined. The overall rate for Medicaid beneficiaries age 65 and older declined from 21.6 percent to 18.1 percent, with the largest decline among older beneficiaries.

### Conclusion

Despite the substantial role that family and friends continue to play in providing assistance and supports to older people with disabilities, and the growth in alternatives to institutional care, some older severely disabled people continue to rely on nursing home settings for long term services and supports. The nursing home resident population consists mainly of long-stay residents, and both their number of conditions and needs for assistance in functioning have increased in recent years. These individuals largely rely on Medicaid to pay the costs of their care. Sustaining further reductions in the nursing home population by caring for more of these severely disabled older individuals in community-based settings will require levels of assistance, and physical environments, capable of meeting these needs.

### Introduction

The proportion of elderly adults over age 65 in nursing homes has declined over the past two decades, most noticeably in recent years. Reasons suggested for this trend include reductions in disability rates among the elderly, improvements in mechanisms for coping with disability, and changes in the residential and long-term care options available to elderly people with disabilities. This paper focuses on the characteristics, needs, and payment sources for care, of older nursing home residents, and changes in these as the size of the resident population has declined between 1999 and 2004.

### Study Approach

The National Nursing Home Survey was conducted in 1999 and again, most recently, in 2004 by the National Center for Health Statistics. Residents were sampled from nursing homes selected from the universe of all nursing homes in the U.S. and the total sample is representative of individuals resident in nursing homes on a given day (details regarding sample design for both 1999 and 2004 are at <a href="http://www.cdc.gov/nchs/nnhs.htm">http://www.cdc.gov/nchs/nnhs.htm</a>). The current resident sample of persons 65 or older in 1999 (n=7,383) is representative of 1.47 million people; the 2004 older current resident sample (n = 11,939) is representative of 1.32 million older people.

Three study populations were developed for this analysis: individuals with stays of under 30 days, residents with stays of 90 days or longer, and individuals with stays of 1 year or longer (a subset of the 90 days or longer group). Recently admitted persons with stays of less than 30 days will take different paths – some after a short-stay for post-acute care or rehabilitation will return to the community, others are at the beginning of a permanent residential shift to a nursing home. Those with stays of 90 days or longer have almost exceeded the Medicare Skilled Nursing Facility benefit (maximum of 100 days), and are at

high risk of remaining a nursing home resident. A previous analysis of older individuals discharged from nursing homes to the community (alive and stable or recovered) found only 6.7% had been in a nursing home beyond the 90-day mark; 72.9% of discharges to the community were among individuals with stays of less than 30 days.<sup>4</sup> Individuals resident for a year or longer can be regarded as permanent residents (only 1.3% of all discharges to the community occurred among persons resident longer than 1 year).

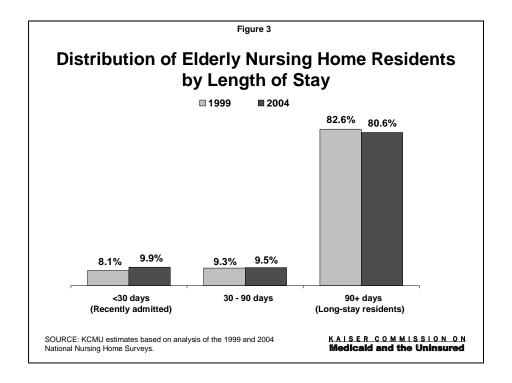
Comparisons between the older nursing home resident populations in 1999 and 2004 are complicated by changes that were made to the 2004 National Nursing Home Survey data collection instruments to improve and expand the information available. For demographic characteristics, the same data were collected in the two years. For other variables, comparable measures were constructed. Details on variables constructed for this analysis are in the Appendix.

Data from the 1999 and 2003 Medicare Current Beneficiary Survey (MCBS) were used to compare the percentage of elderly Medicaid beneficiaries residing in nursing homes (full or part-year) versus community settings only. The MCBS is an ongoing survey of a nationally representative sample of the Medicare population conducted with support from the Centers for Medicare and Medicaid Services (<a href="www.cms.hhs.gov/MCBS">www.cms.hhs.gov/MCBS</a> provides details regarding the survey design and contents).

### Findings:

### Length of stay and characteristics of elderly nursing home residents

The overall number of elderly individuals who were long-stay nursing home residents declined from 1.21 million to 1.06 million between 1999 and 2004. On any given day four-fifths of the elderly nursing home population are long-stay residents (individuals resident for 90 days or longer), and just over half can be considered permanent residents (resident 1 year or longer). Between 1999 and 2004, persons recently admitted (resident for less than 30 days) rose from 8% to 10% of the elderly nursing home population (Figure 3).



Overall, the demographic profile of nursing home residents changed little between 1999 and 2004 (Table 1). The nursing home population remains predominantly female, and among long-stay residents in 2004, 60% were widowed. The nursing home population remains heavily skewed toward the oldest ages among people age 65 or older. Those 85 or older represent 41% of recently admitted persons and 55% of permanent residents. The age

profile of the long-stay nursing home population remained unchanged--about 13% ages 65 to 74, 34% ages 75 to 84, and 53% ages 85 or older--between 1999 and 2004, although as a recent analysis of the 2004 National Nursing Home Survey indicates, the proportion of all older people who are in a nursing home has declined over the past 3 decades.<sup>5</sup>

Hospitals remain the primary site from which people are admitted to nursing homes. Not surprisingly, close to 2/3 of recently admitted individuals entered from hospitals (66% in 1999; 62% in 2004). Among long-stay and permanent residents, however, lower percentages were admitted from hospitals in 2004 than in 1999 (41% vs. 46% and 39% vs. 44%, respectively). The proportions admitted from a private residence are higher among long-stay and permanent residents than among recently admitted individuals, but relatively unchanged since 1999 (a little under one-third). Although the numbers are small, the proportion of persons admitted from assisted living in the past 5 years has increased (from 5.7% to 8.6% among long-stay residents), a trend that bears watching. Assisted living facilities vary in their ability to meet needs of residents if they become increasingly disabled.

Table 1. Demographic characteristics of elderly nursing home residents in 1999 and 2004

	Persons recently admitted (resident <30 days)		Long-stay residents (90 days or longer)		Permanent residents (1 year or longer)	
Total (in thousands) % of elderly nursing home population <sup>1</sup>	1999 (120) 8.1%	2004 (133) 9.9%	1999 (1,210) 82.6%	2004 (1,062) 80.6%	1999 (840) 57.3%	2004 (743) 56.4%
Age:						
65-74	18.5	15.3	12.6	12.6	12.2	12.2
75-84	40.7	43.4	34.2	34.1	32.0	32.4
85+	40.8	41.2	53.2	53.4	55.7	55.4
Gender:						
Male	33.8	33.7	24.7	23.9	23.7	22.3
Female	66.2	66.3	75.3	76.1	76.3	77.7
Marital status <sup>2</sup> :						
Married	23.4	28.7	16.6	19.4	15.1	18.1
Widowed	57.2	53.1	63.0	60.1	63.7	59.9
Never married	3.6	4.9	4.8	7.0	5.2	7.8
Single	7.0	3.4	7.6	4.2	8.0	4.3
Divorced/separated	6.4	6.6	6.5	8.1	6.4	8.8
Where staying prior to admission <sup>2</sup> :						
Private Residence	20.1	23.0	31.8	31.1	33.9	32.6
Hospital	65.5	61.7	46.4	41.3	44.5	39.3
Nursing Home	7.7	5.2	11.5	12.1	11.4	12.0
Assisted Living	4.3	5.2	5.7	8.6	5.3	8.2
Other	1.1	1.9	1.6	3.4	1.5	3.9

<sup>&</sup>lt;sup>1</sup>Table does not include persons resident for 30 to <90 days. Older nursing home residents are persons age 65 or older. Permanent residents are a subset of the long-stay resident category.

Source: KCMU estimates based on analysis of the 1999 and 2004 National Nursing Home Surveys.

<sup>&</sup>lt;sup>2</sup>Categories do not add to 100.0% due to missing information.

### Physical and mental/cognitive conditions among elderly nursing home residents

Disease prevalence was higher, and multiple conditions were more common, among nursing home residents in 2004, compared to 1999, indicating an increasingly sicker population (Table 2). Even among recently admitted residents, 69% had one or more of 5 physical diagnoses (COPD, stroke, diabetes, heart disease, hip fracture) in 2004, compared to 62% in 1999. The proportion with one or more mental or cognitive diagnoses (dementia, depression, schizophrenia, affective and other serious disorders) increased (34% compared to 27% in 1999), and the percentage with both physical and mental or cognitive diagnoses rose from 15% to 24%.

Increases in disease prevalence and multiple conditions were greater among long-stay and permanent residents over the past 5 years. Over two-thirds of long-stay and permanent residents in 2004 had multiple physical conditions (67% and 66% respectively). Increases in multiple mental/cognitive diagnoses, and both physical and mental/cognitive conditions, were even greater. In 2004, 39% of long-stay residents had both physical and mental/cognitive conditions, compared to 25% in 1999.

Table 2. Diagnoses among elderly nursing home residents in 1999 and 2004

	Persons recently admitted (resident <30 days)		Long-stay residents (90 days or longer)		Permanent residents (1 year or longer)	
Diagnoses <sup>1</sup>	1999	2004	1999	2004	1999	2004
Physical:						
COPD	15.0	19.0	11.7	14.6	11.1	13.8
Stroke	16.0	22.0	21.6	24.3	21.9	24.8
Diabetes	21.5	26.0	17.6	23.8	16.6	23.7
Heart disease <sup>2</sup>	32.4	38.7	29.2	37.5	29.3	36.6
Hip fracture	1.5	2.2	0.7	1.0	0.6	1.0
One or more	62.5	69.3	58.1	67.0	57.7	66.5
Mental/Cognitive:						
Dementia	10.3	11.3	24.7	23.4	25.6	24.7
Depression	12.3	19.4	19.4	36.8	20.1	37.8
Schizophrenia	1.7	1.0	3.4	3.9	4.0	4.5
Affective and other serious						
disorders <sup>3</sup>	6.0	10.5	12.0	22.4	12.3	23.4
One or more	27.1	34.0	47.9	60.8	50.1	62.3
Both Physical and Mental/Cognitive	15.5	23.8	25.0	39.2	26.2	39.6

<sup>&</sup>lt;sup>1</sup>In each year 12 diagnosis fields were reviewed. Up to 6 admitting (one primary and 5 secondary) and 6 current (one primary and 5 secondary) diagnoses were reviewed for 1999. In 2004, one primary admitting, one current primary, and 10 current secondary diagnoses were reviewed. ICD-9 codes were used to create diagnostic categories.

Source: KCMU estimates based on analysis of the 1999 and 2004 National Nursing Home Surveys.

<sup>&</sup>lt;sup>2</sup>Heart disease includes both congestive heart failure and ischemic heart disease.

<sup>&</sup>lt;sup>3</sup>Affective disorders includes bipolar and unipolar affective disorders. Other serous mental disorders includes personality disorders, anxiety disorders, other psychotic and other serious mental disorders.

### Functioning and ADL assistance to elderly nursing home residents

The percentage of long-stay and permanent nursing home residents who can walk without help from another person was smaller in 2004 than in 1999 (Table 3), and substantially reduced if help from another person is defined to include supervision as well as hands-on assistance. Individuals able to walk without help from another person represented 30% of these residents in 1999. In 2004, only 18% of long-stay or permanent residents walked without help or supervision from another person. Differences in the questions about walking and assistance with walking may account for some of the change (see Appendix for details). For example, persons who were bedfast or chairfast in 1999 were defined as not walking; in 2004 these individuals could be classified as either not walking or walking with assistance. Recently admitted residents had better mobility function in 2004 than previously, perhaps reflecting a broader spectrum of functioning in this growing segment of the nursing home population.

Number of ADLs where help was provided is based on information about receipt of help from another person (see Appendix for details). In 2004, both hands-on help and supervision were asked about, whereas in 1999 only help from another person was obtained. Two estimates are provided for 2004, help from another person and both hands-on help and supervision (in parentheses). It cannot be determined whether in 1999, reports of help from another person may also have included supervision in some instances. Considering help from another person only in 2004, the percentage of persons receiving assistance with 5 ADLs increased among long-stay residents from 26% in 1999 to 34% in 2004; and for permanent residents from 26% to 36%.

Table 3. Functioning and receipt of ADL assistance among elderly nursing home residents in 1999 and 2004

	Persons recently admitted (resident <30 days)		Long-stay residents (90 days or longer)			Permanent residents (1 year or longer)			
	1999	2004		1999	2004		1999	2004	
Walking ability <sup>1</sup> :									
Walks without help <sup>2</sup>	21.9	17.3	(9.1)	30.2	27.7	(17.8)	30.4	27.5	(18.1)
Walks with help of another person	37.6	49.8	(58.0)	23.0	30.9	(40.8)	20.9	28.2	(40.8)
Does not walk	40.5	32.9	(32.9)	46.8	41.4	(41.4)	48.7	44.3	(44.3)
Number of ADLs where help provide	led¹:								
0	2.3	10.2	(6.4)	4.4	5.5	(1.6)	4.4	5.1	(1.6)
1	4.6	4.7	(3.1)	6.8	8.9	(6.8)	6.8	8.9	(6.8)
2	9.3	4.9	(2.8)	10.1	7.0	(6.1)	9.8	6.8	(6.8)
3	11.7	6.3	(4.2)	13.7	7.7	(6.1)	13.3	7.3	(5.8)
4	49.0	46.6	(36.0)	39.2	36.7	(25.2)	39.4	35.5	(23.5)
5	23.3	27.2	(47.5)	25.9	34.2	(54.3)	26.4	36.3	(56.1)
Difficulty with bowel or bladder co	ontrol <sup>3</sup> :								
Yes	45.1	58.9		32.9	38.1		30.7	35.9	
No	54.9	41.1		67.1	61.9		69.3	64.1	

<sup>&</sup>lt;sup>1</sup>Estimates in ( ) include supervision as well as hands-on help. This distinction was not made in 1999, so help from another person in 1999 may or may not have included supervision.

Source: KCMU estimates based on analysis of the 1999 and 2004 National Nursing Home Surveys.

<sup>&</sup>lt;sup>2</sup>In 1999, includes persons who used equipment but received no help from another person.

<sup>&</sup>lt;sup>3</sup>Includes persons with ostomy, indwelling catheter or other device, as well as persons who were incontinent.

The percentages essentially double (to 54% for long-stay and 56% for permanent residents) if both hands-on help and supervision are considered in 2004. Recently admitted residents appear less in need of ADL assistance in 2004, if only hands-on help is considered (10% with no ADL assistance provided vs. 2% in 1999), although these differences decrease (6% receiving no ADL assistance vs. 2% in 1999), or reverse (47% receiving assistance with 5 ADLs in 2004 vs. 23% in 1999) if both hands-on help and supervision are considered.

Difficulty with bowel or bladder control is somewhat higher in 2004 among both longstay and permanent residents. Recently admitted patients, many of whom are admitted from hospitals for post-acute care or rehabilitation, typically have higher percentages of persons with bowel or bladder control difficulty.

### Sources of payment at admission and currently among elderly nursing home residents

General patterns of payment sources for nursing home residents have remained the same (see Appendix for details on construction of source of payment variables), but there are signs of change (Table 4). Among recently admitted persons in both 1999 and 2004, Medicare was the primary source of payment for about half. Both long-stay and permanent residents were more likely to be individuals who were already Medicaid eligible on admission, consistent with a higher percentage of these individuals being admitted directly from a private residence. The percentage with Medicaid as the primary payer on admission has decreased from 40.9% to 35.4% among long-stay residents, although because missing/pending sources of payment at admission were much higher in 2004 than 1999, these comparisons must be made cautiously (the major reason for missing/pending primary sources of payment at admission was billing records that were not available).

Table 4. Sources of payment at admission and currently among elderly nursing home residents in 1999 and 2004

		Persons recently admitted (resident <30 days)		Long-stay residents (90 days or longer)		Permanent residents (1 year or longer)	
	1999	2004	1999	2004	1999	2004	
Primary source at admission <sup>1</sup> :							
Self	12.5	6.8	18.6	18.9	19.5	19.5	
Private	11.2	5.8	7.8	2.3	7.1	2.3	
Medicare	56.0	51.8	29.3	28.6	26.9	25.0	
Medicaid	16.9	12.2	40.9	35.4	42.9	35.1	
Other	1.6	1.5	.9	.8	.9	.8	
Missing/Pending	1.8	21.9	2.4	14.1	2.6	17.3	
Primary current source <sup>1</sup> :							
Self			16.2	21.1	15.4	19.0	
Private			5.1	.8	4.3	.8	
Medicare			10.5	4.7	9.1	3.6	
Medicaid			66.8	68.8	70.0	72.5	
Other			.7	.8	.5	.7	
Missing/Pending			.8	3.7	.8	3.5	
Any current private insurance	contribution:						
No	65.9	65.8	87.4	91.4	89.7	92.4	
Private only	8.6	5.8	5.1	.8	4.3	.8	
With self <sup>2</sup>	3.4	1.3	2.9	3.1	2.4	2.8	
With Medicare <sup>2</sup>	19.8	7.8	3.9	1.0	2.9	.5	
Missing/Pending	1.9	19.3	.8	3.7	.8	3.5	

<sup>&</sup>lt;sup>1</sup>For primary source at admission, over the first month or since admission; for primary current source, over the past month.

Source: KCMU estimates based on analysis of the 1999 and 2004 National Nursing Home Surveys.

<sup>&</sup>lt;sup>2</sup>Self or Medicare were primary current payment sources.

Current primary source of payment reflects the primary payment source in the past month. Medicaid is the main payer for both long-stay and permanent residents. The proportion of residents relying on Medicaid as their primary payer was relatively unchanged between 1999 and 2004 (from 67% to 68% for long-stay residents; from 70% to 72% for permanent residents). The percentage relying primarily on individual or family resources has increased somewhat (from 16% to 21% among long-stay residents). The small percentage of long-stay and permanent residents shown as having Medicare as primary current payer occurs for two reasons. First, long-stay residents were defined as persons with stays of 90 days or longer. Medicare would be the primary payer over the prior month for individuals in the 90 to 110 or 115 day range who used the Medicare SNF benefit (covers the first 120 days of a posthospital nursing home stay). Secondly, when nursing home residents are hospitalized, if the stay lasts at least 3 days, and skilled care is needed upon the resident's return, Medicare benefits will apply. Nursing facilities typically hold beds for a number of days when a person is hospitalized (rules vary by state and are set by Medicaid programs) so that a long-stay resident returning to the nursing home would not be considered newly admitted.

Private insurance appears to have declined between 1999 and 2004 as both a primary payment source at admission (with caveats regarding missing/pending data) and a primary current source of payment. Individuals who rely on private insurance only represent a small percentage of residents, regardless of whether they are recently admitted or long-stay. Private insurance as a supplementary current source of payment also appears to have declined, however. Among recently admitted persons, although similar percentages in 1999 and 2004 had no contribution from private insurance toward covering costs (about 65%), there was a substantial decline in private insurance as supplemental to Medicare. (Again, however, the

higher percentage of missing/pending information for persons recently admitted in 2004 suggests the need for caution in interpreting the data.)

Although Medicare covers 100% of skilled nursing facility care for the first 20 days, after that co-payments are required (until the benefit runs out at 100 days). To the extent that in 2004, as compared to 1999, a higher percentage of individuals among those recently admitted were early in their stays, private insurance contributions to cover the co-pay would not be called for. The trend toward a lower percentage of people with private insurance contributing toward the current costs of their stay also holds for long-stay and permanent, as well as recently admitted, residents however. In 1999, 87% of long-stay residents had no contributions from private insurance, the biggest decline being for private insurance as the primary and only current source of payment, compared to 91% in 2004. The difference is small, but bears watching. If private long-term care insurance covers both nursing home and home-based care, persons with this coverage may be better positioned to return to the community, and may be less likely to be represented among the long-stay population in the future.

### Long-stay elderly Medicaid nursing home residents

The absolute number of long-stay elderly Medicaid residents dropped between 1999 and 2004 from 808,000 to 731,000 nationwide (Table 5), mirroring the decline in the overall long-stay nursing home population in general. Although their numbers declined, the percentage of nursing home residents who are long-stay and covered by Medicaid remained about the same between 1999 and 2004 (67% and 69%, respectively). Medicaid long-stay residents remain concentrated among the oldest old; about half are 85 or older and 85% are 75 or older (Figure 4). In 2004, the percentage who received help or supervision in walking from

another person constituted two-fifths, and another two-fifths of these residents did not walk and moved about only by virtue of wheelchairs (or similar devices). Half of Medicaid long-stay residents needed supervision or help from another person in all 5 ADLs; another quarter needed supervision or help in 4 ADLs. The percentage of Medicaid long-stay residents with one or more physical conditions was about two-thirds; just over three-fifths had one or more mental or cognitive conditions. Two-fifths of the Medicaid long-stay resident population in nursing homes had both a physical and mental/cognitive condition.

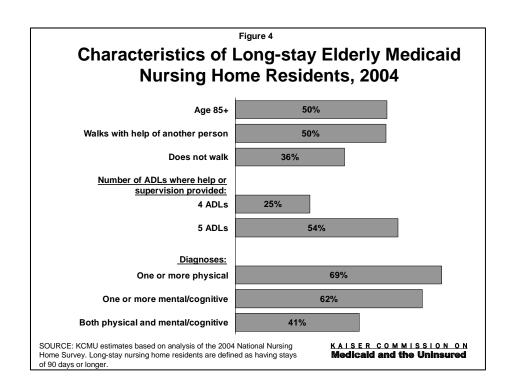


Table 5. Profile of long-stay elderly Medicaid nursing home residents in 1999 and 2004

	1999 Medicaid Long-stay residents	2004 Medicaid Long- stay residents
Proportion of all elderly nursing home residents	66.8%	69.0%
(in thousands)	(808)	(731)
Age:		
65-74	15.1	14.5
75-84	35.3	35.2
85+	49.6	50.3
Walking ability <sup>1</sup> :		
Walks without help <sup>2</sup>	30.0	19.1(13.5)
Walks with help of another person	21.7	44.6(50.1)
Does not walk	48.3	36.3 (36.3)
Number of ADLs where help provided <sup>1</sup>		
0	3.7	5.6 (1.3)
1	6.2	9.6 (7.1)
2	10.5	7.0 (6.5)
3	14.3	8.2 (6.3)
4	39.6	35.8 (24.8)
5	25.7	33.8 (54.0)
Difficulty with bowel or bladder control <sup>3</sup>	67.8	61.4
Diagnoses <sup>4</sup>		
One or more physical	60.4	68.5
One or more mental/cognitive	49.1	61.8
Both physical and mental/cognitive	26.1	40.8

<sup>&</sup>lt;sup>1</sup>Estimates in ( ) include supervision as well as hands-on help. This distinction was not made in 1999, so help from another person in 1999 may or may not have included supervision.

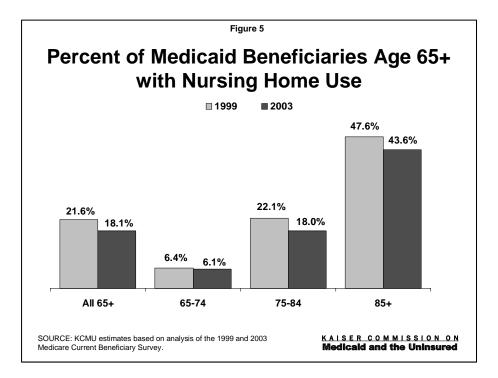
Source: KCMU estimates based on analysis of the 1999 and 2004 National Nursing Home Surveys.

<sup>&</sup>lt;sup>2</sup>In 1999, includes persons who used equipment but received no help from another person.

<sup>&</sup>lt;sup>3</sup>Includes persons with ostomy, indwelling catheter or other device, as well as persons who were incontinent.

<sup>&</sup>lt;sup>4</sup>See Table 2 for physical and mental/cognitive diagnoses.

Figure 5 compares data from the 1999 and 2003 Medicare Current Beneficiary Survey on the proportion of elderly Medicaid beneficiaries residing in nursing homes (full or partyear). The proportion of Medicaid beneficiaries age 65 residing in nursing homes declined over this period, and the decline was greater among the oldest Medicaid recipients. Among Medicaid beneficiaries ages 65 to 74, the percentage in nursing homes is small and has remained fairly constant at around 6%. Among those 85 and older, however, the percentage who were nursing home residents declined from 48% to 44% between 1999 and 2003.



Growth in community-based care alternatives to nursing homes, as well as assisted living and other group residential options, have grown, and been suggested as one reason for a shrinking nursing home population. Other research shows there is considerable variability at the state level in availability and provision of home and community-based services to people with long-term care needs who live in community settings, however. Nonetheless, the decline in the proportion of elderly Medicaid beneficiaries residing in nursing homes suggests a shift toward community residential settings, as opposed to a decline in the numbers of

elderly Medicaid recipients (which increased from about 4.2 million in 1999 to 4.8 million in 2003).

### Conclusion

Despite the substantial role that family and friends continue to play in providing assistance and supports to older people with disabilities, and the growth in alternatives to institutional care, some older severely disabled people continue to rely on nursing home settings for long term services and supports. The nursing home resident population consists mainly of long-stay residents, and both their number of conditions and needs for assistance in functioning have increased in recent years. These individuals largely rely on Medicaid to pay the costs of their care. Sustaining further reductions in the nursing home population by caring for more of these severely disabled older individuals in community-based settings will require levels of assistance, and physical environments, capable of meeting these needs.

<sup>&</sup>lt;sup>1</sup> Alecxih, L. 2006. Nursing Home Use of "Oldest Old" Sharply Declines. National Press Club Presentation Nov. 21; Bishop C. 1999. Where Are the Missing Elders? The Decline in Nursing Home Use, 1985-1995. Health Affairs, 18(4): 146-155.

<sup>&</sup>lt;sup>2</sup> Freedman,VA, Martin LG, Schoeni RF et al. 2002. Recent trends in disability and functioning among older U.S. adults. JAMA 288:3137-46.; Freedman VA, Agree EM, Martin LG, Cornman JC. 2006. U.S. trends in assistive technology and personal care for disability in late life. 1999-2001. Gerontologist 46:124-27.

<sup>&</sup>lt;sup>3</sup> Spillman B.C. and Black K.F. 2006. The Size and Characteristics of the Residential Care Population: Evidence from Three National Surveys for The Office of the Assistant Secretary for Planning and Evaluation found at <a href="http://www.aspe.hhs.gov/daltcp/reports/2006/3natlsur.pdf">http://www.aspe.hhs.gov/daltcp/reports/2006/3natlsur.pdf</a>; Medicaid 1915(c) Home and Community-based Service Programs: Data Update. 2006. at <a href="http://www.kff.org/medicaid/7575.cfm">http://www.kff.org/medicaid/7575.cfm</a>

<sup>&</sup>lt;sup>4</sup> Kasper, J. 2005. Who Stays and who Goes Home: Using National Data on Nursing Home Discharges and Long-Stay Residents to Draw Implications for Nursing Home Transition Programs. At <a href="http://www.kff.org/medicaid/7386.cfm">http://www.kff.org/medicaid/7386.cfm</a>.

<sup>&</sup>lt;sup>5</sup> Alecxih, L. 2006. Nursing Home Use of "Oldest Old" Sharply Declines. National Press Club Presentation Nov. 21; Bishop C. 1999. Where Are the Missing Elders? The Decline in Nursing Home Use, 1985-1995. <u>Health</u> Affairs, 18(4): 146-155.

<sup>&</sup>lt;sup>6</sup> Ibid.

<sup>&</sup>lt;sup>7</sup> Komisar, H.L., J. Feder and J.D. Kasper. 2005. Unmet Long-Term Care Needs: An Analysis of Medicare-Medicaid Dual Eligibles. <u>Inquiry</u> 42(2): 171-182; Niefeld, M. and J.D. Kasper. 2005. Access to Ambulatory Medical and Long-Term Care Services Among Elderly Medicare and Medicaid Beneficiaries: Organizational, Financial and Geographic Barriers. <u>Medical Care Research and Review</u> 62: 300-319; Summer L. 2003. Choices and consequences: The availability of community-based long-term care services to the low income population at <a href="http://ltc.georgetown.edu/pdfs/choicesfull.pdf">http://ltc.georgetown.edu/pdfs/choicesfull.pdf</a>.

<sup>&</sup>lt;sup>8</sup> Wolff J.L. and J.D. Kasper. 2006. Caregivers of Frail Elders: Updating a National Profile. <u>Gerontologist</u> 46(3): 344-356.

### **APPENDIX**

### Physical and Mental Diagnosis in 1999 and 2004:

Diagnostic information (Table 2) is drawn from ICD-9 codes recorded at the time of admission and at the time of the survey (current diagnoses). The medical record for each resident was the source of this information. In 1999, a primary and up to 5 additional diagnoses were obtained both at the time of admission and currently (up to 12 diagnoses in all); in 2004, a primary admitting and current diagnosis were collected and up to 15 current secondary diagnoses (up to 17 diagnoses in all). For purposes of this study, a maximum of 12 diagnosis fields were used for each year -- all fields in 1999, and in 2004, the primary admitting and current diagnoses plus 10 secondary diagnoses (the percentage of individuals with more than 10 secondary diagnoses was 5%). Similar numbers of diagnostic fields were used so that differences in prevalence would not be due to differences in number of diagnoses recorded. ICD-9 codes used were developed using clinical expertise.

### Functioning and receipt of ADL assistance

Walking ability: In 1999 the nursing facility aide who provided information on residents responded yes or no to the question "Does (resident) currently receive any assistance in walking?" If yes, questions were asked about whether the resident walked with the help of special equipment or walked with the help of another person. Persons who were reported as bedfast or chairfast, were classified as not walking; for these individuals the question about receiving assistance in walking was not asked. In 1999, walking ability was defined as: walks without hands-on help (does not receive help from another person; person may or may not use special equipment), walks with hands-on assistance (receives help from another person), does not walk (bedfast or chairfast).

In 2004, two questions were asked about walking: one about walking in one's room and one about walking in the corridor. Respondents for residents were asked to indicate whether the resident was independent, needed supervision, had limited assistance, had extensive assistance, was totally dependent or the activity did not occur. Two measures were created. Persons who were independent both in walking in one's room and walking in the corridor were considered independent on both measures; persons who did not walk in one's room and did not walk in the corridor were considered as not walking on both measures.

Persons who had limited or extensive assistance, or were totally dependent were classified as receiving help on both measures. For one measure persons who needed supervision in walking but received no hands-on assistance were considered independent; for the other they were considered to receive help.

Number of ADLs where help provided: In both 1999 and 2004, five activities of daily living were used to create a measure of the number of ADLs (0 to 5) where help was provided: bathing or showering, dressing, eating, transferring in and out of a bed or chair, and using the toilet (assistance using the toilet room in 1999). In 1999, for persons currently receiving assistance in an ADL, a follow-up question asked about help from special equipment, and help from another person. The number of ADLs where residents received help from another person was used to create the 1999 variable.

In 2004, ADL assistance was classified, using the Minimum Data Set coding scheme, as independent (no assistance), supervision, limited assistance, extensive assistance, total dependence, and activity did not occur. Two measures of the number of ADLs where help was provided were developed: one counted the number of ADLs where there was limited or extensive assistance, total dependence or the activity did not occur; the other also included persons receiving supervision.

Sources of payment at admission and currently:

Information on sources of payment was drawn from nursing facility records. In both years, payment sources were grouped into major categories. In 1999, Medicaid also included Supplemental Security Insurance, other government assistance or welfare; in 2004 Medicaid also included welfare or other government assistance (SSI was not used as a separate category). The inclusion of these other payers with Medicaid had a minimal effect; in 1999 the proportion of long-stay residents with Medicaid as a primary source of payment at admission using Medicaid alone was 40.7% vs. 40.9% including SSI, other government assistance or welfare. Other payers in 1999 included religious organizations, foundations, agencies, VA contract or other VA compensation, and other unspecified; in 2004 other payers life care, department of veterans affairs contract or other VA programs, and other unspecified. Missing in 1999 included payment source not yet determined and don't know/refused; in 2004 this category included payment source not yet determined, admission billing records not available and don't know/refused. The percentage of missing/pending information on sources of payment was substantially higher in 2004 for primary payment source at admission, even among long-stay and permanent residents. The main reason was admission billing records that were not available (about 55% of recently admitted persons with missing payment information at admission; 69% of long-stay residents with missing information). Medicare, private insurance and self pay (described as "own income, family support, Social Security benefits, retirement funds" in 1999, "self/private pay/out-of-pocket" in 2004) were individual payment categories in 1999 and 2004.

The approach to obtaining sources of payment differs between 1999 and 2004. In 1999, a single primary source of payment for care for the month of admission was asked for. A single current primary source of payment (for the last month) also was obtained; followed

by a question that asked about all secondary current sources of payment (for the last month). In 2004, all sources of payment "that covered or will cover the cost of care for the first month or billing period" were obtained to reflect sources of payment at admission. All sources of payment "that covered or will cover the cost of care for the past month or billing period" were obtained to reflect current sources of payment.

In order to do comparisons of sources of payment across years, a primary source of payment at admission and currently were created for both years. In 1999, the primary source of payment at admission had already been determined. For 2004, the primary source of payment at admission was determined hierarchically: Medicaid if any Medicaid source of payment; Medicare if any Medicare source of payment; self if no other payers; private insurance if no other payers; other.

Current sources of payment for 1999 were determined using both the current primary source indicated in the interview and all secondary sources obtained. For 2004, all sources of payment indicated were used. As for the primary source of payment at admission, a hierarchical approach was used to designate the primary current source of payment.

Designating a primary source of payment necessarily ignores some information regarding combinations of payers that may come into play over the course of a month in a nursing home. For example, among residents with Medicare as a primary payer on admission in 2004, for 67% Medicare was the only payer (as would be the case for persons with stays at time of interview that were within 20 days of admission), for 32% self or private insurance were sources of payment in addition to Medicare (reflecting sources of co-payment for persons whose stays extended beyond the first 20 days under the Medicare SNF benefit). In order to examine contributions by private insurance, even when it was not the primary current

source of payment, a variable was created to reflect private insurance as a payment source when self or Medicare were designated as the primary payment source.



1330 G STREET NW, WASHINGTON, DC 20005
PHONE: (202) 347-5270, FAX: (202) 347-5274
WEBSITE: WWW.KFF.ORG/KCMU

Additional copies of this report (#7663) are available on the Kaiser Family Foundation's website at www.kff.org.

