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A longitudinal study of admissions to residential and nursing home care following the Community Care Reforms

**Robin Darton, Ann Netten
and Pamela Brown**

PSSRU discussion paper 1417
September 1997

The **PERSONAL SOCIAL SERVICES RESEARCH UNIT** undertakes social and health care research, supported mainly by the United Kingdom Department of Health, and focusing particularly on policy research and analysis of equity and efficiency in community care, long-term care and related areas — including services for elderly people, people with mental health problems and children in care. The PSSRU was established at the University of Kent at Canterbury in 1974, and from 1996 it has operated from three sites:

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**A Longitudinal Study of Admissions to
Residential and Nursing Home Care
Following the Community Care Reforms**

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Paper given at the British Society of Gerontology Annual Conference,
Bristol, 19-21 September 1997

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Abstract

In the autumn of 1995, the PSSRU began a longitudinal survey of elderly people admitted to residential and nursing home care with local authority financial support. The survey was commissioned by the Department of Health, initially to help to improve the Standard Spending Assessment (SSA) formulae for allocating funds to local authorities for the support of elderly people. Information was collected from social workers in 18 local authorities in England about the circumstances of admission and the level of dependency for 2544 elderly people admitted during a three-month period from mid-October 1995. Follow-up studies have been conducted six and 18 months after admission, and further follow-ups are planned for 30 and 42 months after admission. In the follow-ups, managers of homes are being asked to provide information on mortality or the current location of the elderly people, and, for those still resident in the home, information on dependency corresponding to that collected on admission. If an elderly person has moved to another home, the same information is being requested from the new home. A separate exercise is being conducted to follow up those elderly people who returned to a private household or who were discharged to hospital, in which information is being collected from social workers.

This paper contains tables of results from the initial survey of admissions and from the follow-up six months after admission, including some information about those admitted to a private household or who were discharged to hospital. The paper was drafted for use in preparing a presentation for the 1997 British Society of Gerontology Annual Conference. Approximately 4 per cent of the individuals included in the survey were recorded as having assets which exceeded the capital limit for public funding, and these cases have been excluded from the tables. Individuals admitted from another residential or nursing home have been excluded from the tables of results from the six month follow-up. For the remainder, information on location or mortality at six months was obtained for 84 per cent; of these, 64 per cent were still in the original home and 25 per cent had died. For elderly people who had left residential or nursing home care, the main reasons recorded for their departure were: their acceptance of the home; changes in their functional abilities; and the ability of the home to provide the appropriate care, such as for those exhibiting behavioural problems associated with dementia.

1. Introduction

In the autumn of 1995, the PSSRU began a longitudinal survey of elderly people admitted to residential and nursing home care with local authority financial support. The survey was commissioned by the Department of Health, initially to help to improve the Standard Spending Assessment (SSA) formulae for allocating funds to local authorities for the support of elderly people, and was undertaken in collaboration with 18 local authorities in England. The initial phase of the survey was conducted during the three months from mid-October 1995 to mid-January 1996, and identified over 2500 permanent admissions. For each person admitted, information was collected from social workers about their previous living arrangements, the circumstances of their admission, their dependency characteristics, the type of home to which they were admitted and the contractual arrangements made with the home. Follow-up studies have been conducted six and 18 months after admission, and further follow-ups are planned for 30 and 42 months after admission. In the follow-ups, managers of homes are being asked to provide information on mortality or the current location of the elderly people, and, for those still resident in the home, information on dependency corresponding to that collected on admission. If an elderly person has moved to another home, the same information is being requested from the new home. A separate exercise is being conducted to follow up those elderly people who returned to a private household or who were discharged to hospital without their bed in the home being kept open. Information about each of these cases is being obtained from a social worker in the local authority which made the original assessment for admission, and includes information on dependency for individuals who were still alive and who had not returned to residential or nursing home care. Those re-admitted to a residential or nursing home were then included in the main series of follow-up studies.

This paper presents results from the initial survey of admissions and from the follow-up six months after admission, including some information about those admitted to a private household or who were discharged to hospital. The paper was drafted for use in preparing a presentation for the 1997 British Society of Gerontology Annual Conference. The presentation focused on characteristics of admission, patterns of mortality and discharge, and levels of dependency six months after admission. This paper consists largely of tables; detailed discussions of the results appear elsewhere. A more detailed paper on the six month follow-up, based on all cases in scope (see below), was prepared previously (Darton and Brown, 1997).

2. The Dataset

In the admissions survey, information was collected about 2544 individuals, after excluding a small number of cases found to be out of scope. However, 106 were recorded as having assets exceeding the capital limit for public funding (£8000 at the time of the survey), and the information presented in this paper is based on the 2438 individuals (2544-106) without assets exceeding £8000.

The original survey in autumn 1995 included a check on the location of the elderly people one month after admission. Among the 2438 individuals included in this paper, 165 were reported to have died and 62 were reported as having moved to another location within one month of admission. At the six month follow-up, information was obtained for 1840 of the 2438 individuals, including two cases reported to have died within one month of

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admission, although the information on location at the six month follow-up was incomplete for three cases. No information was obtained at the six month follow-up for 45 of the 62 individuals who were reported as having moved to another location within one month of admission. For these cases, the information obtained on their location one month after admission has been used as their location at six months. Thus the information on location at the six month follow-up is based on 2045 cases (1840-3+165-2+45), 84 per cent of the 2438 individuals included in the admissions survey. Among the individuals in the survey as a whole, those who were not followed up at six months included 44 who refused to be included in the follow-up and eight who were untraceable. No information is available on the reasons for nonresponse for the remaining (majority of) cases.

Among the 2544 individuals in the admissions survey, 331 had been admitted from another residential or nursing home, including one individual for whom the source of admission was missing. Among the 2438 individuals included in this paper, the corresponding figure was 315 (including the individual for whom the source of admission was missing). The individuals admitted from another residential or nursing home are not included in the information presented on the six month follow-up, which is based on 2123 individuals (2438-315). Information on their location at six months was obtained for 1793 of these 2123 individuals (84 per cent). Of these 1793 cases, 64 per cent were still in the original home, 25 per cent had died, 4 per cent had moved to a different home, 4 per cent had moved to a private household and 3 per cent had entered hospital (table 8).

The cases have not been weighted for the analyses presented in this paper.

The sources shown for the tables identify the relevant computer runs.

3. Measures of Dependency

The survey was designed to collect information relating to physical dependency and mental state which could be used to approximately reproduce the Barthel Index of ADL (activities of daily living) (Collin et al., 1988) and the MDS CPS (Cognitive Performance Scale) (Morris et al., 1994). In addition, the information collected could be used to provide approximations to other summary measures of dependency, for comparisons with previous surveys. In particular, approximations could be made to the Index of Independence in Activities of Daily Living (Katz et al., 1963, 1970) and to a measure of aggregate dependency originally developed for the 1970 Census of Residential Accommodation (DHSS, 1975), which is defined in Davies and Knapp (1978).

Each of these measures is included in the tables in this paper. In the case of mental confusion, the categories of the MDS Cognitive Performance Scale have been grouped into three categories. These are as follows: intact = intact (code 0); mild impairment = borderline intact (code 1), mild impairment (code 2) or moderate impairment (code 3); severe impairment = moderately severe impairment (code 4), severe impairment (code 5) or very severe impairment (code 6). These groupings have been selected to provide an approximation to the classification used in previous surveys, in which residents were classified as mentally alert, mildly confused or severely confused. For the purposes of presentation, the scores on the Barthel Index have been grouped into four categories, following Granger et al. (1979). The

amended version of the Index of Independence in Activities of Daily Living presented in this paper was designed to provide an approximation to the classification of physical disability used by the Audit Commission (1985), and is described in Darton and Wright (1992).

4. Follow-Up of Elderly People who left Residential or Nursing Home Care

As noted in section 1, a separate exercise was conducted to follow up those elderly people who left the residential or nursing home to return to a private household or who were discharged to hospital without their bed being kept open. In the course of the check on the location of the elderly people one month after admission and at the six month follow-up, 131 such individuals were identified in the survey as a whole. Ninety-nine of these individuals were followed up by contacting the local authority which made the original assessment for admission. Of the other 32 cases, 22 had died after leaving the home, five could not be traced and five were omitted from the follow-up exercise in error.

Among the 99 cases followed up, three were found to be out of scope and three were recorded as having assets exceeding the capital limit for public funding. For the remaining 93 individuals, table 19 shows their location at the time of the six month follow-up and their most recent known location, as reported in the separate follow-up exercise. Individuals admitted from another residential or nursing home have not been excluded from this table. Information was obtained from the local authorities for 82 of the 93 individuals, although seven refused to be included in the follow-up exercise. Among the remaining 75 individuals, 21 had died. In addition, one of the 11 individuals for whom no information was obtained from the local authority was also known to have died, and is recorded accordingly in the table. One of the individuals who refused to be included in the follow-up exercise was recorded as being in the original home.

For the 75 individuals for whom information was obtained from the local authority and who did not refuse to be included in the follow-up, their most recent location or, for those who had died, their location at the time of death, was as follows. Thirty-three people were living in a private household; 17 people had moved to a different home from the one in which they were originally placed; ten people had been re-admitted to the original residential or nursing home, including a small number who appeared to have never left the home; nine people were in temporary hospital care; and four people were in hospital long-stay care. For the remaining two cases, the location was not reported.

The situations resulting in the failure of placements can be broadly divided into three groups: factors associated with the clients' acceptance of their new home; changes in their functional abilities; and factors related to the ability of the homes to provide the care needed. The most common reason given by social workers for clients leaving the original placement was that they did not settle, either because they wanted to be back in their own home, or with their partner, or because they objected to some aspect of the care provided, such as the lack of privacy. Of those who were discharged to a private household, half gave this kind of reason for the discharge, while a third of these cases were able to go home because their physical condition improved or their rehabilitation was successfully completed. For the small number of people who moved into a long-term hospital bed, the most common reason was the inability of the home to cope with behavioural problems associated with dementia.

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Clients discharged from the original home but found on follow-up to have been placed in residential or nursing home care also exhibited a wide variety of reasons for leaving the first placement. Almost all the people who had moved into nursing home care were said to have shown an increase in dependency, particularly a loss of mobility or increased confusion. Those who moved into a different residential home, however, had left the original home for a range of reasons more related to their personal reactions than to a change in functioning.

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Table 1.
Demographic Characteristics of Admissions by Type of Bed to which Admitted (Percentages)

Demographic characteristics	Residential beds			Nursing beds	All beds
	Local authority	Voluntary	Private		
Number of individuals	206	243	865	1124	2438
Age group					
65 to 69	2	3	3	4	3
70 to 74	8	9	8	10	9
75 to 79	15	12	15	19	17
80 to 84	31	24	26	26	26
85 and over	45	52	48	41	45
Sex					
Male	31	28	25	32	29
Female	69	72	75	68	71
Source of admission					
Domestic household	44	40	35	18	28
Sheltered housing	8	10	8	2	5
Residential care	7	8	10	12	10
Nursing home	<1	2	2	4	3
Hospital	39	39	44	63	52
Other	0	2	2	2	1
Household composition					
Lived alone	34	31	31	9	21
Lived with others	18	19	12	11	13
In hospital	39	39	44	63	52
In resid/nursing home	8	10	11	16	13
Elsewhere	0	2	2	2	1
Household composition (8 weeks before admission)					
Lived alone	67	62	62	38	51
Lived with others	29	31	24	35	30
In hospital	3	4	7	16	10
In resid/nursing home	1	2	6	11	7
Elsewhere	0	1	<1	<1	<1

Table 1. (cont'd)
Demographic Characteristics of Admissions by Type of Bed to which Admitted (Percentages)

Demographic characteristics	Residential beds			Nursing beds	All beds
	Local authority	Voluntary	Private		
Household tenure					
Owner occupied/mortgaged	14	17	11	7	10
Rented from LA/NT/HA	33	29	25	10	19
Privately rented	4	2	5	2	3
Other	2	1	2	<1	1
Not living in household	48	50	57	80	66
Household tenure (8 weeks before admission)					
Owner occupied/mortgaged	24	26	23	22	23
Rented from LA/NT/HA	60	56	50	44	49
Privately rented	8	7	10	5	7
Other	3	3	3	2	3
Not living in household	4	8	14	27	19

Source: S498

Table 2.
Reasons for Admission by Type of Bed to which Admitted (Percentages)

Reasons for admission	Residential beds			Nursing beds	All beds
	Local authority	Voluntary	Private		
Number of individuals	206	243	865	1124	2438
Physical or functional needs	74	78	75	83	79
Mental health needs	51	49	47	39	44
Carer related factors	44	49	40	38	40
Lack of motivation	22	29	25	16	21
Housing problem	14	13	16	15	15
Social contact	4	2	3	1	2
Other	7	8	7	3	5

Source: S498

Table 3.
Disorders and Diseases of Admissions by Type of Bed to which Admitted (Percentages)

Disorders and diseases	Residential beds			Nursing beds	All beds
	Local authority	Voluntary	Private		
Number of individuals	206	243	865	1124	2438
Dementia (diagnosed)	40	40	37	39	38
Arthritis	39	36	33	28	32
Stroke	18	17	17	26	21
Cardiovascular disease	21	15	19	20	19
Respiratory/chest disease	15	15	14	15	14
Deafness	19	15	15	11	14
Depression (diagnosed)	12	11	16	12	13
Fracture	9	9	10	11	10
Blindness	9	9	10	10	10
Malignancy	4	3	5	13	8
Other psychiatric disorder	5	7	6	5	6
Gastrointestinal disease	4	4	4	6	5

Source: S498

Table 4.
Dependency of Admissions by Type of Bed to which Admitted (Percentages)

Dependency characteristics	Residential beds			Nursing beds	All beds
	Local authority	Voluntary	Private		
Number of individuals	206	243	865	1124	2438
Mobility					
Walk outdoors	19	15	16	4	11
Walk indoors and stairs	20	14	15	5	11
Indoors on level/with aids	35	32	31	11	23
Walk indoors with help	11	15	21	23	20
Mobile in wheelchair	11	19	13	28	20
Chair or bedfast	4	5	4	29	15
Self-care (need assistance)					
Wash face and hands	25	36	35	67	49
Bath or wash all over	89	88	85	95	90
Dress	51	60	58	88	72
Feed self	7	12	12	38	23
Use WC	20	30	29	73	49
Transfer (bed/chair)	22	34	34	76	52
Continence					
Continent	55	44	55	24	40
Occasional accidents	33	35	31	30	31
Incontinent	12	21	14	46	29
Confusion					
Intact	24	19	22	18	20
Mild impairment	48	49	54	36	45
Severe impairment	28	33	24	46	35
Frequency of problem behaviour					
Never/very unusual	67	60	69	65	66
Sometimes (>weekly)	23	23	19	20	20
Frequently (daily)	10	17	12	16	14
Barthel Index (grouped)					
Low dependence (Score >12)	59	46	52	12	34
Moderate dep. (Score 9-12)	29	30	28	19	24
Severe dep. (Score 5-8)	10	18	16	32	23
Total dependence (Score 0-4)	2	7	4	37	19
Require nursing care					
Daily dressings	16	21	17	39	28
Bedfast procedures	<1	<1	2	24	12
Other tasks	9	7	9	37	22
Any tasks	21	27	23	66	43

Source: S498

Table 5.
Dependency of Admissions by Source of Admission (Percentages)

Dependency characteristics	Hospital	Private household	Other	Total
Number of individuals	1269	818	350	2437
Barthel Index (grouped)				
Low dependence (Score >12)	27	44	33	34
Moderate dep. (Score 9-12)	22	28	23	24
Severe dep. (Score 5-8)	27	17	22	23
Total dependence (Score 0-4)	23	11	23	19
Confusion				
Intact	19	23	19	20
Mild impairment	45	47	41	45
Severe impairment	36	31	40	35
Frequency of problem behaviour				
Never/unusual	67	65	62	66
Sometimes (>weekly)	19	21	21	20
Frequently (daily)	13	13	17	14

Source: S498

Table 6.
Dependency of Admissions by Type of Household (Percentages)

Dependency characteristics	Single person household	Multi-occupancy household	Total
Number of individuals	1252	734	1986
Barthel Index (grouped)			
Low dependence (Score >12)	42	26	36
Moderate dep. (Score 9-12)	25	26	25
Severe dep. (Score 5-8)	21	23	21
Total dependence (Score 0-4)	13	26	17
Confusion			
Intact	22	18	21
Mild impairment	50	40	46
Severe impairment	28	42	33
Frequency of problem behaviour			
Never/unusual	69	62	66
Sometimes (>weekly)	19	22	20
Frequently (daily)	12	16	14

Source: S498

Table 7.
Logistic Regression Equations Comparing Individuals admitted to a Nursing Bed with those admitted to a Residential Bed (Odds Ratios)

Demographic and dependency characteristics	Equation 1	Equation 2
Age group		
65-69	1.0000	1.0000
70-74	0.7991	1.0180
75-79	0.9188	1.0682
80-84	0.7023	0.8689
85 and over	0.6278	0.8131
Sex		
Male	1.0000	1.0000
Female	0.7977*	0.8625
Source of admission		
Domestic household	1.0000	1.0000
Sheltered housing	0.5395**	0.5983
Residential or nursing home	1.9623***	2.2572***
Hospital	2.2314***	2.3014***
Other	1.8334	1.3962
Household composition		
Lived alone	0.4970***	0.4887***
Lived with others	0.7437	0.7699
Not living in household	1.0000	1.0000
Barthel Index (grouped)		
Low dependence (Score >12)	1.0000	1.0000
Moderate dependence (Score 9-12)	2.7537***	2.2917***
Severe dependence (Score 5-8)	7.3856***	4.8078***
Total dependence (Score 0-4)	28.1913***	12.9747***

Table 7. (cont'd)
Logistic Regression Equations Comparing Individuals admitted to a Nursing Bed with those admitted to a Residential Bed (Odds Ratios)

Demographic and dependency characteristics	Equation 1	Equation 2
Confusion		
Intact	1.0000	1.0000
Mild impairment	0.6745***	0.7013**
Severe impairment	0.9649	1.0697
Frequency of problem behaviour		
Never/very unusual	1.0000	1.0000
Sometimes (>weekly)	1.0143	1.0808
Frequently (daily)	1.1851	1.3756*
Require daily dressings		
No	-	1.0000
Yes	-	1.9454***
Require bedfast procedures		
No	-	1.0000
Yes	-	6.7904***
Require other nursing care		
No	-	1.0000
Yes	-	4.0820***
Number of individuals		
Total number	2438	2438
Number in analysis	2269	2269
McFadden's R ²	0.275	0.349
Percentage of correct predictions		
Residential beds	80.7	86.1
Nursing beds	70.1	71.4
Overall	76.0	79.5

Source: S506

Note: * $0.10 \geq p > 0.05$; ** $0.05 \geq p > 0.01$; *** $0.01 \geq p$.

Table 8.
Location of Individuals at 6 Month Follow-Up by Type of Bed to which Originally Admitted

Location	All beds		Residential bed		Nursing bed	
	No.	%	No.	%	No.	%
Total number of individuals	2438	-	1314	-	1124	-
Number admitted from a residential or nursing home	315	-	139	-	176	-
Number not admitted from a residential or nursing home	2123	100.0	1175	100.0	948	100.0
In a residential or nursing home	1227	57.8	765	65.1	462	48.7
In home originally admitted to	1154	54.4	716	60.9	438	46.2
Moved to another residential home	15	0.7	15	1.3	-	-
Moved to a nursing home	34	1.6	34	2.9	-	-
Moved to a residential home	7	0.3	-	-	7	0.7
Moved to another nursing home	17	0.8	-	-	17	1.8
Elsewhere	121	5.7	89	7.6	32	3.4
In hospital (bed not being kept open)	56	2.6	39	3.3	17	1.8
In private household	65	3.1	50	4.3	15	1.6
Died in home or while temporarily absent	445	21.0	150	12.8	295	31.1
No or incomplete information	330	15.5	171	14.6	159	16.8

Source: S499

Table 9.
Mean Length of Stay of Individuals who had left the Home within 6 Months of Admission, by Type of Bed to which Originally Admitted (Days)

Location	All beds		Residential bed		Nursing bed	
	Mean	No.	Mean	No.	Mean	No.
Number of individuals	-	639	-	288	-	351
Total number who had left original home	-	625	-	280	-	345
Number with information on length of stay	61	582	66	258	57	324
Individuals with length of stay <6 months						
In a different home	77	20	86	14	56	6
Moved to residential bed	76	47	80	31	69	16
Moved to nursing bed						
Elsewhere						
In hospital (bed not being kept open)	66	49	75	34	44	15
In private household	52	58	47	45	67	13
Died in home or while temporarily absent	59	408	65	134	56	274

Source: S499

Table 10. Distribution of Length of Stay of Individuals who had left the Home within 6 Months of Admission, by Type of Bed to which Originally Admitted (Percentages of Individuals who had left)

Length of stay	All beds		Residential bed		Nursing bed	
	All individuals	Died	All individuals	Died	All individuals	Died
Number of individuals	582	408	258	134	324	274
Length of stay						
Under 2 weeks	16	13	12	8	19	17
2-4 weeks	20	14	20	10	21	17
4-6 weeks	12	7	13	4	12	9
6-8 weeks	10	8	9	6	11	10
8-10 weeks	6	5	7	5	6	4
10-12 weeks	6	5	5	3	7	6
12-14 weeks	4	3	5	2	4	3
14-16 weeks	5	3	6	2	4	4
16-18 weeks	4	3	4	2	4	4
18-20 weeks	4	3	6	4	3	2
20-22 weeks	4	2	5	2	3	2
22-24 weeks	5	3	5	3	4	3
24-26 weeks	3	2	3	1	3	2
0-26 weeks	100	70	100	52	100	85

Source: S499

**Table 11.
Demographic Characteristics of Individuals by Location at 6 Month Follow-Up (Percentages)**

Demographic characteristics	Residential bed	Nursing bed	Hospital	Private household	Died	No information	All individuals
Number of individuals	734	493	56	65	445	330	2123
Age group							
65-69	3	4	4	6	3	4	4
70-74	8	11	14	13	7	10	9
75-79	15	19	13	17	18	17	17
80-84	25	27	39	19	25	28	26
85 and over	48	39	30	44	47	41	44
Sex							
Male	26	31	36	23	34	31	30
Female	74	69	64	77	66	69	70
Source of admission							
Domestic/sheltered household	52	27	34	52	31	35	39
Hospital	47	72	63	45	67	62	60
Other	1	<1	4	3	2	3	2
Household composition (8 weeks before admission)							
Lived alone	68	43	63	60	52	47	55
Lived with others	25	39	25	35	35	34	32
Not living in household	7	18	13	5	13	18	13
Household tenure (8 weeks before admission)							
Owner occupied/mortgaged	24	24	23	40	22	26	24
Rented from LA/NT/HA	57	49	55	42	54	46	52
Privately rented	10	6	7	11	8	6	8
Other	3	3	2	3	2	3	3
Not living in household	7	18	13	5	13	18	13

Source: S499

Table 12.
Dependency Characteristics of Individuals at Admission by Location at 6 Month Follow-Up (Percentages)

Dependency characteristics	Residential bed	Nursing bed	Hospital	Private household	Died	No information	All individuals
Number of individuals	734	493	56	65	445	330	2123
Mobility							
Walk outdoors	16	5	13	25	4	10	11
Walk indoors and stairs	18	7	9	11	7	10	11
Indoors on level/with aids	31	12	32	28	20	21	23
Walk indoors with help	17	23	23	14	23	21	20
Mobile in wheelchair	13	28	17	14	26	17	20
Chair or bedfast	4	25	6	8	21	20	15
Self-care (need assistance)							
Wash face and hands	33	63	30	28	59	52	48
Bath or wash all over	86	93	91	71	95	92	90
Dress	55	85	68	42	81	75	70
Feed self	10	30	7	15	33	27	23
Use WC	26	69	41	23	60	53	47
Transfer (bed/chair)	30	74	45	29	65	55	52
Continence							
Continent	54	28	46	55	27	38	40
Occasional accidents	33	29	20	32	34	28	31
Incontinent	13	42	34	12	39	34	29

**Table 12. (cont'd)
Dependency Characteristics of Individuals at Admission by Location at 6 Month Follow-Up (Percentages)**

Dependency characteristics	Residential bed	Nursing bed	Hospital	Private household	Died	No information	All individuals
Confusion							
Intact	22	19	23	38	20	16	20
Mild impairment	52	38	47	50	40	48	46
Severe impairment	26	43	30	13	40	46	34
Frequency of problem behaviour							
Never/very unusual	67	66	74	80	67	62	66
Sometimes (>weekly)	22	18	19	13	21	21	20
Frequently (daily)	12	17	8	8	13	17	14

Source: S499

Table 13.
Measures of Aggregate Dependency of Individuals at Admission by Location at 6 Month Follow-Up (Percentages)

Dependency measures	Residential bed	Nursing bed	Hospital	Private household	Died	No information	All individuals
Number of individuals	734	493	56	65	445	330	2123
Amended Index of ADL							
No dependent functions	13	5	9	26	4	6	8
Dependent in bathing	24	5	16	26	8	13	14
1-4 dep/can transfer and feed	29	13	29	14	19	21	21
Dependent in transfer or feed	35	77	46	34	68	59	56
Barthel Index (grouped)							
Low dependence (Score >12)	55	15	39	57	19	31	34
Moderate dependence (Score 9-12)	28	20	30	23	25	21	24
Severe dependence (Score 5-8)	15	35	18	8	25	25	23
Total dependence (Score 0-4)	3	30	13	12	31	23	18
DHSS 4-category							
Minimal	10	2	6	30	2	6	6
Limited	25	3	19	25	10	14	15
Appreciable	22	13	26	17	19	15	18
Heavy	44	82	49	28	69	65	61

Source: S499

Table 14.
Dependency of Individuals at Admission by Location at Admission, Type of Bed to which Originally Admitted and Location at 6 Month Follow-Up

Dependency characteristics and location at admission	Residential bed			Nursing bed				
	No. of individuals	In original home or residential bed	Elsewhere	Died	No. of individuals	In original home or nursing bed	Elsewhere	Died
Number of individuals	988	720	120	148	777	451	38	288
Mean Barthel Score								
Lived alone	363	13.4	13.8	11.7	83	9.6	11.3	7.3
Lived with others	151	12.6	10.5	10.0	105	7.0	11.4	7.2
Hospital	474	12.5	13.3	11.1	588	6.6	6.8	6.0
Severe confusion (%)								
Lived alone	346	22	14	24	77	36	17	23
Lived with others	148	36	50	30	97	52	0	53
Hospital	453	24	20	32	520	44	44	48

Source: S499

Table 15.
Dependency of Individuals at Admission by Location 8 Weeks Before Admission, Type of Bed to which Originally Admitted and Location at 6 Month Follow-Up

Dependency characteristics and location 8 weeks before admission	Residential bed				Nursing bed			
	No. of individuals	In original home or residential bed	Elsewhere	Died	No. of individuals	In original home or nursing bed	Elsewhere	Died
Number of individuals	988	720	120	148	777	451	38	288
Mean Barthel Score								
Lived alone	663	13.1	14.0	11.7	339	7.7	9.2	6.9
Lived with others	265	12.2	11.1	9.7	296	6.6	7.1	6.0
Hospital	60	12.9	13.6	12.8	141	6.4	7.5	5.4
Severe confusion (%)								
Lived alone	643	22	14	21	329	39	33	33
Lived with others	261	33	39	44	288	49	31	57
Hospital	43	32	17	67	77	46	50	59

Source: S499

Table 16.
Logistic Regression Equations Comparing Individuals who had Died with those who were Still Alive at 6
Month Follow-Up, by Type of Bed to which Originally Admitted (Odds Ratios)

Demographic and dependency characteristics	All beds	Residential bed	Nursing bed
Age group			
65-69	1.0000	1.0000	1.0000
70-74	0.8319	0.8821	0.7785
75-79	1.1828	1.0818	1.2482
80-84	1.1879	1.2543	1.0992
85 and over	1.4412	1.5235	1.3064
Sex			
Male	1.0000	1.0000	1.0000
Female	0.7333**	0.7328	0.7302*
Source of admission			
Domestic/sheltered household	1.0000	1.0000	1.0000
Hospital	1.0904	1.1620	1.0655
Other	1.7656	1.3682	2.2908
Household composition			
Lived alone	1.1166	2.7402	0.9027
Lived with others	1.0188	2.8844*	0.7449
Not living in household	1.0000	1.0000	1.0000
Barthel Index (grouped)			
Low dependence (Score >12)	1.0000	1.0000	1.0000
Moderate dependence (Score 9-12)	1.7045***	1.7407***	1.3335
Severe dependence (Score 5-8)	1.4862**	1.8661**	1.0232
Total dependence (Score 0-4)	2.6069***	3.6498***	1.9489***
Confusion			
Intact	1.0000	1.0000	1.0000
Mild impairment	0.9252	1.0822	0.8581
Severe impairment	1.0047	1.3114	0.8821

Table 16. (cont'd)
Logistic Regression Equations Comparing Individuals who had Died with those who were Still Alive at 6 Month Follow-Up, by Type of Bed to which Originally Admitted (Odds Ratios)

Demographic and dependency characteristics	All beds	Residential bed	Nursing bed
Frequency of problem behaviour			
Never/very unusual	1.0000	1.0000	1.0000
Sometimes (>weekly)	1.1561	1.0012	1.2570
Frequently (daily)	0.9102	0.7428	0.9597
Type of bed			
Residential bed	1.0000	1.0000	-
Nursing bed	2.4922***	-	1.0000
Number of individuals			
Total number	1793	1004	789
Number in analysis	1656	956	700
McFadden's R ²	0.082	0.035	0.026
Percentage of correct predictions			
Still alive	96.9	100.0	93.3
Died	11.4	0.0	15.4
Overall	75.6	84.7	63.7

Sources: S504, S505, S508

Note: * $0.10 \geq p > 0.05$; ** $0.05 \geq p > 0.01$; *** $0.01 \geq p$.

Table 17.

Logistic Regression Equations for Individuals who were Still Alive at 6 Month Follow-Up, Comparing those who had left Residential or Nursing Home Care with those who remained, by Type of Bed to which Originally Admitted (Odds Ratios)

Demographic and dependency characteristics	All beds	Residential bed	Nursing bed
Age group			
65-69	1.0000	1.0000	1.0000
70-74	0.7993	0.9348	0.7727
75-79	0.5022	0.9264	0.1124**
80-84	0.5803	0.8658	0.3190
85 and over	0.4227*	0.6260	0.2284*
Sex			
Male	1.0000	1.0000	1.0000
Female	1.0358	0.9691	1.2809
Source of admission			
Domestic/sheltered household	1.0000	1.0000	1.0000
Hospital	0.9993	1.0011	1.0738
Other	3.4348**	2.9045	2625.1340
Household composition			
Lived alone	1.4264	1.2903	1.5386
Lived with others	1.4835	1.5145	1.2723
Not living in household	1.0000	1.0000	1.0000
Barthel Index (grouped)			
Low dependence (Score >12)	1.0000	1.0000	1.0000
Moderate dependence (Score 9-12)	0.9027	0.9506	0.5516
Severe dependence (Score 5-8)	0.5428*	0.8444	0.1930**
Total dependence (Score 0-4)	1.0984	0.3803	0.9019
Confusion			
Intact	1.0000	1.0000	1.0000
Mild impairment	0.7627	0.9883	0.3474**
Severe impairment	0.5447*	0.5398	0.4678

Table 17. (cont'd)

Logistic Regression Equations for Individuals who were Still Alive at 6 Month Follow-Up, Comparing those who had left Residential or Nursing Home Care with those who remained, by Type of Bed to which Originally Admitted (Odds Ratios)

Demographic and dependency characteristics	All beds	Residential bed	Nursing bed
Frequency of problem behaviour			
Never/very unusual	1.0000	1.0000	1.0000
Sometimes (>weekly)	0.6844	0.7930	0.4421
Frequently (daily)	0.5171	0.9239	0.0000
Type of bed			
Residential bed	1.0000	1.0000	-
Nursing bed	0.7166	-	1.0000
Number of individuals			
Total number	1348	854	494
Number in analysis	1244	810	434
McFadden's R ²	0.039	0.022	0.185
Percentage of correct predictions			
Individuals who remained	100.0	100.0	100.0
Individuals who left	0.0	0.0	6.7
Overall	90.8	89.5	93.6

Sources: S504, S505, S508

Note: * 0.10 ≥ p > 0.05; ** 0.05 ≥ p > 0.01; *** 0.01 ≥ p.

Table 18. Change in Dependency between Admission and 6 Month Follow-Up for Individuals in Residential and Nursing Homes at Follow-Up, Including Deaths, by Source of Admission (Percentages)

Dependency at admission	Dependency at 6 month follow-up														
	All sources of admission				Admitted from domestic household				Admitted from hospital						
	Lower	Same	Higher	Died	All (no.)	Lower	Same	Higher	Died	All (no.)	Lower	Same	Higher	Died	All (no.)
Barthel Index (grouped)															
Score >12	-	58	25	17	33	-	62	24	13	43	-	54	26	20	26
Score 9-12	28	17	26	28	25	32	18	27	24	28	25	17	26	32	22
Score 5-8	26	28	16	29	24	25	33	9	33	17	27	26	19	28	28
Score 0-4	21	32	-	47	18	26	30	-	44	12	20	32	-	48	23
All (number)	17	36	19	28	(1580)	16	41	20	23	(628)	18	33	18	31	(952)
Confusion															
Intact	-	38	36	27	21	-	41	36	23	23	-	35	35	30	19
Mild impairment	16	40	19	25	45	17	43	18	22	46	15	38	20	27	44
Severe impairment	30	37	-	32	35	38	37	-	25	31	26	38	-	37	37
All (number)	18	39	16	28	(1490)	20	41	16	23	(615)	16	37	15	31	(875)

Source: S501

Table 19.
Location of Individuals who left Residential or Nursing Home Care, at 6 Month Follow-Up and Most Recent Known Location

Location	At 6 month follow-up No.	Most recent known location No.
Total number of individuals	93	93
In home originally admitted to	3	7
Same type of bed	3	7
Changed to residential bed	0	0
Changed to nursing bed	0	0
Temporarily absent	0	0
In a different home	0	14
Moved to residential home	0	7
Moved to nursing home/hospice	0	6
Moved to dual registered - residential bed	0	0
Moved to dual registered - nursing bed	0	1
Moved to unspecified type of home	0	0
Elsewhere	89	33
In hospital	27	4
In private household	62	29
Died	1	22
No information	0	17
Refused	0	7
No response	0	10

Source: S509

References

- Audit Commission (1985) *Managing Social Services for the Elderly More Effectively*, HMSO, London.
- Collin, C., Wade, D.T., Davies, S. and Horne, V. (1988) The Barthel ADL Index: A Reliability Study, *International Disability Studies*, **10**, No. 2, 61-63.
- Darton, R. and Brown, P. (1997) *Survey of Admissions to Residential Care. Analyses of Six Month Follow-Up*, PSSRU Discussion Paper No. 1340, Personal Social Services Research Unit, University of Kent at Canterbury.
- Darton, R. and Wright, K. (1992) Residential and Nursing Homes for Elderly People: One Sector or Two?, in F. Laczko and C.R. Victor (eds) *Social Policy and Elderly People. The Role of Community Care*, Avebury, Aldershot.
- Davies, B.P. and Knapp, M.R.J. (1978) Hotel and Dependency Costs of Residents in Old People's Homes, *Journal of Social Policy*, **7**, Part 1, 1-22.
- Department of Health and Social Security (1975) *The Census of Residential Accommodation: 1970. I. Residential Accommodation for the Elderly and for the Younger Physically Handicapped*.
- Granger, C.V., Albrecht, G.L. and Hamilton, B.B. (1979) Outcome of Comprehensive Medical Rehabilitation: Measurement by PULSES Profile and the Barthel Index, *Archives of Physical Medicine and Rehabilitation*, **60**, 145-154.
- Katz, S., Downs, T.D., Cash, H.R. and Grotz, R.C. (1970) Progress in Development of the Index of ADL, *The Gerontologist*, **10**, Part 1, 20-30.
- Katz, S., Ford, A.B., Moskowitz, R. W., Jackson, B. A. and Jaffe, M. W. (1963) Studies of Illness in the Aged. The Index of ADL: A Standardized Measure of Biological and Psychosocial Function, *Journal of the American Medical Association*, **185**, No. 12, 914-919.
- Morris, J.N., Fries, B.E., Mehr, D.R. Hawes, C., Phillips, C., Mor, V. and Lipsitz, L.A. (1994) MDS Cognitive Performance Scale, *Journal of Gerontology: Medical Sciences*, **49**, No. 4, M174-M182.