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Cross-Sectional Survey of Residential and Nursing Homes for Elderly People. Comparisons of residents in residential and nursing homes for elderly people, 1981-1996

Robin Darton and Kathryn Miles

PSSRU discussion paper 1374
December 1997

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**Cross-Sectional Survey of Residential and Nursing Homes for Elderly People:
Comparisons of Residents in Residential and Nursing Homes for Elderly People,
1981-1996**

Robin Darton and Kathryn Miles

PSSRU DP1374
December 1997

Abstract

This paper compares the characteristics of elderly people living in residential and nursing homes over the period 1981-1996. The paper draws on information collected in four surveys: a 1981 survey of local authority, private and voluntary residential homes; a 1986 survey of private and voluntary residential and nursing homes; a 1988 survey of local authority residential homes; and a 1996 survey of local authority, private and voluntary residential homes, and private and voluntary nursing homes.

The distributions of length of stay for permanent residents in local authority and voluntary residential homes and nursing homes in 1996 were similar to those in 1986/88. Mean lengths of stay for voluntary residential homes and nursing homes were slightly shorter in 1996 than in 1986, whereas the reverse appears to be the case for local authority homes. However, the mean length of stay of permanent residents in private residential homes was substantially longer in 1996 than in 1986. In terms of their length of stay, permanent residents in private residential homes resembled those in local authority homes in 1996.

In 1996, residents in nursing homes were most likely to have been admitted from hospital and residents in residential homes were most likely to have been living alone prior to admission, particularly in voluntary residential homes. Residents in private residential homes were more likely to have been admitted from hospital than residents in local authority and voluntary residential homes. A larger proportion of residents in voluntary residential homes and nursing homes had been admitted from hospital in 1996 than in 1986, whereas the proportion had decreased for private residential homes and, to a greater extent, for local authority homes.

In 1996, residents in nursing homes were substantially more dependent than residents in residential homes, whereas levels of dependency among residents of local authority, private and voluntary residential homes were quite similar. Prior to 1996, residents in voluntary residential homes were less dependent than residents in local authority and private residential homes. Levels of dependency increased in all types of home between 1986/88 and 1996, but the changes were greater for voluntary residential homes and nursing homes, although levels of dependency among residents of nursing homes were also greater than in local authority and private residential homes in 1986/88. In 1981, residents in local authority and private residential homes had similar levels of physical functioning and were much more dependent than residents in voluntary residential homes. Between 1981 and 1986/88 levels of dependency among residents of local authority and voluntary residential homes increased, but levels of dependency among residents of private residential homes were very similar in 1981 and 1986.

1. Introduction

The purpose of this paper is to compare the characteristics of elderly people living in residential care and nursing homes over the period 1981-1996. The paper draws on information collected in four surveys conducted in 1981, 1986, 1988 and 1996, and includes local authority, private and voluntary residential homes and private and voluntary nursing homes. Three of the four surveys, in 1981, 1986 and 1996, were conducted by the Personal Social Services Research Unit (PSSRU) at the University of Kent at Canterbury, the 1986 survey being conducted in collaboration with the Centre for Health Economics (CHE) at the University of York, while the fourth, a survey of local authority residential homes, was undertaken by the Social Services Inspectorate (SSI) of the Department of Health in 1988. Each of the surveys collected comparable information about residents, thus enabling comparisons to be made over time. Comparable information about homes and staffing was also collected in the 1981, 1986 and 1996 surveys and, to a limited extent, in the 1988 survey, but the relevant analysis of the 1996 data has not yet been completed. Similar comparisons have been made in relation to residential homes in 1981 and 1986, incorporating information collected by the Department of Health and Social Security (DHSS) in the 1970 Census of Residential Accommodation (DHSS, 1975) and in the (unpublished) 1971 DHSS sample survey of private residential homes (Darton and Wright, 1990).

2. Descriptions of the Four Surveys

2.1. *PSSRU Survey of Residential Accommodation for the Elderly, 1981*

This survey was conducted in the autumn of 1981, in collaboration with 12 local authorities in England and Wales. The survey was commissioned by the former Department of Health and Social Security, and covered residential homes for elderly people run by local authorities and registered residential homes run by private and voluntary organisations. A small number of voluntary homes exempt from registration were also included. The 12 local authorities were selected from among 35 which expressed a willingness to participate. The final selection of local authorities was based on the classification of local authorities in the DHSS summary of Local Authority Planning Statement (LAPS) returns (DHSS, 1979), with representatives of the main groups of local authorities, i.e. London boroughs, metropolitan districts and non-metropolitan counties, to be included. Welsh authorities were added to the classification as explained in Darton (1986a). The 12 authorities selected included four London boroughs, four metropolitan districts, three English counties and one Welsh county.

Homes in the areas selected for the survey were sent a self-completion questionnaire, containing questions about the facilities provided by homes, the staff, the residents, and the charges to residents, and a liaison officer in each local authority social services department coordinated the collection of the questionnaires from homes. The questionnaires used in the survey were developed from those used in the 1970 Census of Residential Accommodation (DHSS, 1975), which covered local authority and voluntary residential homes for elderly people and younger people with a physical handicap, and the (unpublished) 1971 DHSS sample survey of private residential homes. Completed questionnaires were obtained from 235 local authority homes, 68 voluntary homes (a response rate of 69 per cent) and 153 private homes (a response rate of 71 per cent), accommodating a total of 14007 residents. In 1982 and early 1983, a follow-up survey of proprietors was conducted in one-third of the

respondent private homes (Judge, 1984). The methodology of both surveys is described in Darton (1986a), and the characteristics of the residents of the homes are described in Darton (1986b).

2.2. PSSRU/CHE Survey of Residential and Nursing Homes, 1986

This survey was conducted during the autumn of 1986 and the spring of 1987 in a sample of 855 private and voluntary registered residential care and nursing homes in 17 local authority areas in England, Scotland and Wales. The survey was commissioned by the former Department of Health and Social Security, and covered homes catering for elderly people, people with learning disabilities, people with mental illness and people with physical disabilities, although over 90 per cent of nursing homes included elderly people in their clientele. The uneven distribution of homes for people in the younger client groups prevented the use of a random sampling procedure for selecting authorities, and a purposive selection procedure, including stratification by type of area, was used to select the areas. The classification of local authorities used for the 1981 survey was also used to select areas in England and Wales for the 1986 survey, while Scottish authorities were selected independently. For the selection of nursing homes, which are registered and inspected by health authorities, health authorities falling largely within the selected local authorities were included in the sample. The 17 authorities selected included four London boroughs, four metropolitan districts, six English counties, one Welsh county and two Scottish authorities. Six of the 17 authorities had also been included in the 1981 PSSRU survey. Within the selected authorities all residential care and nursing homes for the younger client groups were selected, and subsamples of residential and nursing homes for elderly people were selected, except that, for two of the 17 authorities, only residential care homes for the younger client groups were selected.

A two-stage approach to the sampled homes was used, in which a questionnaire was posted to the home, to be completed by the proprietor or manager, followed by a personal interview, based on the methodology of the 1981 survey and the interview follow-up conducted in private homes. A total of 606 establishments responded, although this figure includes separate questionnaires which were received from the two separate units of one home. The overall response rate, excluding 85 homes found to be out of the scope of the survey, was 79 per cent. Among the 606 homes which responded, 58 provided incomplete information, 16 of which only completed the interview questionnaire. The 590 homes for which the postal questionnaire was completed included 276 residential homes for elderly people, 242 residential homes for the younger client groups and 72 nursing homes. Information was collected for a total of 10653 residents, 4974 of whom were living in residential homes for elderly people and 1662 of whom were living in nursing homes. For the purpose of selecting the sample, dual registered homes were classified as residential or nursing homes depending on which sampling list they appeared, and homes which appeared on the sampling lists for both residential and nursing homes were included with residential homes. However, only a small number of homes appear to have had dual registration. Although 62 of the 590 homes reported that they were registered by both a health authority and a social services department, only 15 were listed as dual registered in the directory published by Laing and Buisson (1987). Two other homes were listed as being dual registered in the Laing and Buisson directory and, of the total of 17 homes, 11 were included

with residential homes and six with nursing homes. The methodology of the PSSRU/CHE survey is described in Darton et al. (1989).

2.3. Social Services Inspectorate Survey of Public Sector Residential Care for Elderly People, 1988

This study was undertaken by the Social Services Inspectorate of the Department of Health as part of a national inspection of management arrangements for public sector residential care for elderly people during 1988. The inspections were carried out in 14 local authorities in England, including five metropolitan districts and nine counties. A separate study was also carried out in four London boroughs. Within each of the 14 local authorities, visits were made to three residential homes for elderly people, and the same information about each resident was recorded by the manager as in the 1981 and 1986 surveys. In this study, information was collected about 1683 residents in the 42 homes. The study is described in the report by the Department of Health Social Services Inspectorate (1989).

2.4. PSSRU Cross-Sectional Survey of Residential and Nursing Homes for Elderly People, 1996

This survey was conducted in the autumn of 1996, in a sample of 822 residential and nursing homes for elderly people in 21 local authorities in England. The survey was commissioned by the Department of Health, and covered residential homes for elderly people managed by local authority social services departments, and registered residential homes for elderly people, registered nursing homes for elderly people and dual registered homes for elderly people run by private and voluntary organisations. The survey formed one part of a broader study of residential and nursing home care for elderly people, as described in Bebbington et al. (1995), and was carried out in the local authorities which had agreed to participate in a survey of admissions to residential and nursing homes in 1995, with a number of modifications.

For the selection of authorities for the survey of admissions, local authorities were stratified by type of authority and then by additional factors according to the type of authority. London boroughs were divided into inner and outer London boroughs, and were then selected to represent different socio-economic groups and, secondly, different migration rates. Metropolitan districts were selected to represent different socio-economic groups and, secondly, different levels of population sparsity, within the constraint that one metropolitan district be selected from each of the six former metropolitan counties. Counties were divided into two geographical groups and were then selected according to migration rate and population sparsity, and, within these, total population. Where there were alternatives within the subgroups, authorities were selected at random. Where a selected authority was unable to participate in the admissions survey, an authority of the same type with similar characteristics was approached as a potential replacement. The final group of local authorities selected for the admissions survey consisted of 18 authorities: five London boroughs, eight metropolitan districts and five counties. Since this sample was rather unbalanced in terms of the number of authorities selected from each type of authority, and, in addition, London boroughs tend to have small numbers of homes, a number of additional authorities in the categories under-represented in the admissions survey were approached for the cross-sectional survey. One of

the local authorities in the admissions survey had recently completed a similar internal survey, and so the final sample of 21 local authorities included 17 of the 18 authorities included in the admissions survey. The 21 authorities included in the cross-sectional survey included seven London boroughs, eight metropolitan districts and six counties. The sampling frames used for selecting the sample of homes were subdivided by local authority for both residential and nursing homes. Within the 21 local authorities, separate samples of local authority homes, private residential and dual registered homes, voluntary residential and dual registered homes and registered nursing homes were selected with probability proportional to size. Since the number of homes in London boroughs tends to be small, the number of private residential and dual registered homes and the number of registered nursing homes selected in London were each doubled. Within the selected homes, individual information was requested for all residents where there were no more than 20 residents, while for homes with more than 20 residents, corresponding information was requested for a sample of 20 residents, selected using a systematic sampling procedure administered by the interviewer. Samples of permanent and short-stay residents were selected separately, up to a maximum of 20 in each case. Thus the sample was designed to be approximately self-weighting for individuals, with two departures from self-weighting resulting from the separate treatment of permanent and short-stay residents and the complete enumeration of residents where there were no more than 20 in the home.

A modified version of the approach to the sampled homes used in the 1986 survey was employed for the survey. Following an initial approach by letter to the selected homes, an interviewer employed by Research Services Limited (RSL) telephoned each home to make an appointment with the home manager to conduct a personal interview. On visiting the home, the interviewer left a copy of a questionnaire to collect information about the individual residents and copies of self-completion questionnaires for staff to complete, which were collected subsequently. The information collected in the personal interview included background information about the home, information about the type of care provided, the physical features of the home, staffing, contractual arrangements and charging arrangements, and was designed to cover similar topics as in the previous surveys. The information collected about the characteristics of residents was designed to correspond to the information collected in the 1995 survey of admissions and, as far as possible, to the information collected in the surveys conducted in 1981, 1986 and 1988.

Information was obtained for 673 of the 822 homes selected for the survey, a response rate of 82 per cent, but a complete response was obtained for 618 homes, 75 per cent of the original sample. The 618 homes which provided a complete response included 160 local authority homes (91 per cent of the original sample), 127 voluntary residential homes (83 per cent), 122 private residential homes (61 per cent), 41 dual registered homes (73 per cent) and 168 nursing homes (71 per cent), although one nursing home was found to have a majority of residents aged under 65 and has been excluded from the analyses presented in this paper. As noted above, few dual registered homes were identified in the 1986 survey and these homes were combined with residential or nursing homes depending on which sampling list they appeared. Since the number of dual registered homes in the 1996 survey was larger, the inclusion of dual registered homes would be likely to have a more pronounced effect, for example increasing aggregate levels of resident dependency in residential homes or reducing aggregate levels of resident dependency in nursing homes. For the purposes of this paper, therefore, the information collected about dual registered homes in the 1996 survey has been

excluded. The methodology of the survey and preliminary results are discussed in Netten et al. (1997).

3. Comparisons of Residents in Residential and Nursing Homes for Elderly People, 1981-1996

3.1. Age and Sex (Table 1)

In the 1996 survey, independent residential homes had slightly larger proportions of females (78 and 79 per cent) than local authority residential homes (74 per cent) and nursing homes (75 per cent). However, the proportions of female residents in the 1996 survey were similar to those in the 1986 and 1988 surveys for local authority and independent residential homes, whereas males accounted for a slightly larger proportion of residents in nursing homes in 1996 than in 1986. Among local authority residential homes, the proportions of females were similar in all three surveys, whereas the proportion of females was greater than in 1981 in voluntary residential homes and smaller than in 1981 in private residential homes.

The mean ages of residents in the 1996 survey ranged from 83 years in nursing homes to 85 years in voluntary residential homes, and at least 50 per cent of residents were aged 85 or over in all four types of home. The mean ages of residents in residential homes were slightly higher than in the 1986 and 1988 surveys, but the difference was more marked for nursing homes due to a ten year difference in the mean ages of male residents in the two surveys. Among residential homes, the changes in mean ages between 1986/88 and 1996 continued an upwards trend between 1981 and 1986/88 for local authority and voluntary homes. However, the mean age of residents in private residential homes declined between 1981 and 1986, and the mean age of residents in 1996 was the same as in 1981, although the mean age for males was slightly lower and the mean age for females was slightly higher in 1996 than in 1981.

3.2. Length of Stay (Table 2)

For local authority and voluntary residential homes and for nursing homes, the distributions of length of stay for permanent residents in the 1996 survey were similar to those in the 1986 and 1988 surveys. The mean lengths of stay for voluntary residential homes and for nursing homes were slightly shorter in 1996 than in 1986, whereas a comparison of the distributions of length of stay for local authority homes would suggest that the mean length of stay for local authority homes was slightly greater in 1996 than in 1988.

In contrast, the distribution of length of stay for permanent residents in private residential homes in 1996 was substantially different from that in 1986. In 1996, permanent residents in private homes resembled those in local authority homes, 29 per cent had been in the home for less than one year and the mean length of stay was 38 months. In 1986, however, 43 per cent of permanent residents in private residential homes had been in the home for less than one year, and the mean length of stay was 22 months. The results of a study conducted in three local authorities in 1992 are consistent with the changes in length of stay of residents in private residential homes between the 1986 and 1996 surveys. In the 1992 study, the mean length of stay of residents in private residential homes was 31 months, and 30

per cent of residents had been in the home for less than one year and 15 per cent had been in the home for five years or over (Darton, 1994). The corresponding figures for local authority homes were also consistent with the distribution of length of stay in the 1988 and 1996 surveys. However, the residents in voluntary residential homes and in nursing homes in the three local authorities had shorter lengths of stay. In the 1992 study, the mean length of stay was 36 months in voluntary residential homes and 21 months in both private and voluntary nursing homes (Darton, 1994).

For local authority residential homes, the distributions of length of stay for permanent residents remained fairly constant between the 1981, 1988 and 1996 surveys. For voluntary residential homes, the mean length of stay was substantially shorter in 1986 and 1996 than in 1981, although in 1996 voluntary residential homes still had the largest proportion of residents who had been in the home for five years or over. For private residential homes the mean length of stay in 1986 was shorter than in 1981, but this was probably due to the rapid expansion of the private residential care sector in the 1980s (Darton and Wright, 1993), and the length of stay distributions for these two years were more similar to each other than to the 1996 distribution.

The information collected on length of stay in each of the four surveys related to the length of stay of current residents at the time of the particular survey, that is, the uncompleted length of stay. In such cross-sectional surveys, residents with shorter lengths of stay will be under-represented compared with those with longer lengths of stay. In homes with high levels of turnover, the mean length of stay computed for current residents will exceed the mean completed length of stay for leavers, as was demonstrated in the study conducted in three local authorities in 1992. In this study, the completed length of stay was obtained for those residents who left the home during a three month period. The highest turnover rates were in private nursing homes, and in these homes the uncompleted length of stay was 21 months, whereas the completed length of stay for leavers was 17 months (Darton, 1994).

3.3. Source of Admission (Table 3)

In the 1996 survey, residents in nursing homes were most likely to have been admitted from hospital, and residents in residential homes were most likely to have been living alone prior to admission, the highest proportion being in voluntary residential homes. Among residential homes, residents of private homes were more likely to have been admitted from hospital than residents in local authority and voluntary residential homes, while residents in local authority homes were more likely to have been living with other people prior to admission.

Compared with 1986, a larger proportion of residents in nursing homes in 1996 had been admitted from hospital. Among residential homes, the proportion of residents admitted from hospital had increased in voluntary homes, but the proportion had decreased for local authority and private residential homes. The decline in the proportion of residents in local authority homes admitted from hospital continued the downwards trend between 1981 and 1988, but the proportion of residents in private residential homes admitted from hospital was the same in 1996 as in the 1981 survey.

Residents in local authority and private residential homes were more likely to have been living alone prior to admission in 1996 than in the previous surveys, whereas the proportion of residents in voluntary homes who had been living alone was slightly greater in the 1986 survey than in 1981 or 1996. However, residents in voluntary residential homes were more likely to have been living alone in all of the surveys.

The proportion of residents recorded as having transferred from another home remained fairly constant across the surveys, but the proportion of residents admitted from sheltered housing increased over the period.

3.4. Physical Dependency (Table 4)

In 1996, levels of physical dependency in nursing homes were substantially greater than in residential homes, as in 1986/88. Among residential homes in the 1996 survey, levels of mobility, the need for assistance in self-care tasks and levels of continence were quite similar, whereas, prior to 1996, levels of physical dependency among residents of voluntary residential homes were lower than among residents of local authority and private residential homes.

In all types of home, problems of physical functioning were greater in 1996 than in 1986/88, but changes in levels of physical functioning were more marked in voluntary residential homes and nursing homes than in local authority and private residential homes, particularly in relation to continence.

In the 1981 survey, residents in local authority and private residential homes had similar levels of physical dependency, but levels of physical dependency among residents of the local authority homes in the 1988 survey were higher than those recorded for private homes in 1986, with the exception of the need for assistance with self-care tasks. Levels of physical dependency increased between 1981 and 1986/88 in local authority and voluntary residential homes, but among private homes levels of physical dependency in 1986 were very similar to those in 1981.

3.5. Mental State (Table 5)

As explained in the notes to the tables, the measure of confusion used for the 1996 survey was based on an approximation to the seven-category MDS Cognitive Performance Scale (Morris et al., 1994), grouped into three categories for the purpose of comparison with the information collected in a single question in the previous surveys. Secondly, the behaviour of residents was classified in terms of frequency for the 1996 survey, but in terms of level of disruption in the previous surveys. Thirdly, information on anxiety was collected for residents in the 1996 survey, but cannot be presented in this paper due to errors in the dataset.

As in the case of physical dependency, mental confusion was more prevalent in nursing homes than in residential homes in the 1996 survey, while residents in residential homes had relatively similar levels of confusion, particularly in the independent sector. In the 1996 survey, 25 per cent of residents in local authority homes were classified as having

severe cognitive impairment, compared with 21 per cent in voluntary residential homes and 20 per cent in private residential homes, while in nursing homes the figure was 42 per cent. In addition, as in the case of physical dependency, mental confusion was less prevalent among residents of voluntary residential homes than among residents of local authority and private residential homes prior to 1996.

Comparisons of levels of confusion between 1996 and previous years are complicated by the change in the method of calculation, but levels of confusion appear to have been greater in 1996 than in previous years, particularly in nursing homes, in which 21 per cent of residents were classified as severely confused in the 1986 survey, compared with 42 per cent who were classified as severely cognitively impaired in the 1996 survey. Among residential homes, the changes appear most marked in the intact (mentally alert) and mild impairment (mildly confused) categories, and changes in levels of confusion were more marked in voluntary residential homes than in local authority and private residential homes, although the proportion of residents classified as intact (mentally alert) fell from 41 per cent to 27 per cent in local authority homes and from 52 per cent to 32 per cent in private residential homes between 1986/88 and 1996.

In the 1981 survey, residents in local authority homes had somewhat higher levels of confusion than residents in private residential homes, but levels of confusion were substantially lower among residents of voluntary residential homes. Between 1981 and 1986/88, levels of confusion increased slightly among residents of local authority homes and more substantially among residents of voluntary residential homes, but, as in the case of physical dependency, levels of confusion among residents of private residential homes in 1986 were very similar to those in 1981.

Although residents of nursing homes were more likely to exhibit antisocial behaviour or symptoms of depression than residents of residential homes in the 1996 survey, the differences were less marked than for the measures of physical functioning or mental confusion. However, as in the case of physical functioning and mental confusion, changes in the level of antisocial behaviour and depression between 1986/88 and 1996 were greatest for residents of voluntary residential homes and nursing homes. Between 1986/88 and 1996, the level of antisocial behaviour appears to have increased for residents of private residential homes, but not for residents of local authority homes, and there was no increase in symptoms of depression in these homes.

Between 1981 and 1986/88, levels of antisocial behaviour increased slightly among residents of local authority residential homes, but not among residents of independent residential homes, and levels of depression remained virtually unchanged. Among local authority homes, symptoms of anxiety were somewhat more prevalent in 1988 than in 1981, but there was no corresponding increase among residents of independent residential homes.

3.6. Aggregate Measures of Dependency (Table 6)

The two summary measures of dependency reinforce the results of the separate comparisons of individual aspects of physical and mental functioning. As explained in the notes to the tables, the Index of ADL is based on six functions: bathing, dressing, toileting, transfer, continence and feeding. The DHSS 4-category measure was developed for the 1970

Census of Residential Accommodation, and is based on mobility, continence, mental state (confusion), and the capacity for self-care in washing, bathing, dressing, feeding and using the toilet.

In 1996, residents in nursing homes were substantially more dependent than residents in residential homes. Sixty-seven per cent of residents in nursing homes were classified in categories E, F or G of the Index of ADL, corresponding to dependence in bathing, dressing, toileting and in at least one other function, and 75 per cent were classified as heavily dependent on the DHSS dependency measure. In contrast, approximately 25 per cent of residents in residential homes were classified in categories E, F or G of the Index of ADL, and approximately 40 per cent were classified as heavily dependent on the DHSS dependency measure.

In the 1996 survey, levels of dependency were quite similar across the different types of residential home, the proportion of residents classified as heavily dependent ranging from 35 per cent in voluntary residential homes to 41 per cent in local authority homes. The two summary measures cannot be reproduced for local authority homes in the 1988 survey without access to the original data, but the lower levels of dependency among residents of voluntary residential homes prior to 1996 are still evident in the table.

As noted above for individual aspects of physical and mental functioning, levels of dependency were greater in all types of home in 1996 than in 1986/88, but the changes were greater for voluntary residential homes and nursing homes, and the summary measures reinforce this. Between 1986 and 1996, the proportion of residents classified as heavily dependent increased from 20 per cent to 35 per cent in voluntary residential homes and from 54 per cent to 75 per cent in nursing homes, compared with an increase from 29 per cent to 36 per cent in private residential homes. Levels of dependency increased between 1981 and 1986 in voluntary residential homes, but, among residents of private homes, levels of dependency in 1986 were very similar to those in 1981, as noted above.

The information collected in the 1981 survey indicated that, overall, residents in local authority and private residential homes had similar levels of dependency, particularly in relation to physical abilities and continence, and, to a lesser extent, mental state, and were much more dependent than residents in voluntary residential homes. Twenty-eight per cent of residents in local authority and private residential homes were classified as heavily dependent, compared with 12 per cent of residents in voluntary residential homes. However, a higher proportion of residents in private residential homes were relatively independent, 34 per cent being classified as minimally dependent, compared with 25 per cent of residents in local authority homes.

4. Summary

The distributions of length of stay for permanent residents in local authority and voluntary residential homes and nursing homes in 1996 were similar to those in 1986/88. Mean lengths of stay for voluntary residential homes and nursing homes were slightly shorter in 1996 than in 1986, whereas the reverse appears to be the case for local authority homes. However, the mean length of stay of permanent residents in private residential homes was

substantially longer in 1996 than in 1986. In terms of their length of stay, permanent residents in private residential homes resembled those in local authority homes in 1996.

In 1996, residents in nursing homes were most likely to have been admitted from hospital and residents in residential homes were most likely to have been living alone prior to admission, particularly in voluntary residential homes. Residents in private residential homes were more likely to have been admitted from hospital than residents in local authority and voluntary residential homes. The proportion of residents in voluntary residential homes and nursing homes who had been admitted from hospital was greater in 1996 than in 1986, whereas the proportion had decreased for private residential homes and, to a greater extent, for local authority homes.

In 1996, residents in nursing homes were substantially more dependent than residents in residential homes, whereas levels of dependency among residents of local authority, private and voluntary residential homes were quite similar. Prior to 1996, residents in voluntary residential homes exhibited lower levels of dependency than residents in local authority and private residential homes. Levels of dependency increased in all types of home between 1986/88 and 1996, but the changes were greater for voluntary residential homes and nursing homes. However, levels of dependency among residents of nursing homes were also greater than in local authority and private residential homes in 1986/88, as reported by Darton and Wright (1992). In 1981, residents in local authority and private residential homes had similar levels of physical functioning and were much more dependent than residents in voluntary residential homes. Between 1981 and 1986/88 levels of dependency among residents of local authority and voluntary residential homes increased, but levels of dependency among residents of private residential homes were very similar in 1981 and 1986, possibly due to the rapid expansion of the private residential care sector in the 1980s (Darton and Wright, 1993). A previous analysis of changes in dependency between 1970/71 and 1981, using information collected in the 1970 Census of Residential Accommodation and the 1971 DHSS sample survey of private residential homes indicated that resident dependency had increased in all three residential care sectors, although changes in the voluntary sector were relatively small, while changes in the private sector were most marked (Darton, 1984).

Tables

Index of Tables

No.	Title
1.	Age and sex of residents in residential and nursing homes for elderly people, 1981-96, by type of home
2.	Length of stay of residents in residential and nursing homes for elderly people, 1981-96, by type of home
3.	Source of admission of residents in residential and nursing homes for elderly people, 1981-96, by type of home
4.	Physical dependency characteristics of residents in residential and nursing homes for elderly people, 1981-96, by type of home
5.	Measures of mental state of residents in residential and nursing homes for elderly people, 1981-96, by type of home
6.	Measures of aggregate dependency of residents in residential and nursing homes for elderly people, 1981-96, by type of home

Notes on the Tables

1. The figures shown in each table are drawn from the four studies described in the text: the 1981 PSSRU Survey of Residential Accommodation for the Elderly; the 1986 PSSRU/CHE Survey of Residential and Nursing Homes; the 1988 Social Services Inspectorate Survey of Public Sector Residential Care for Elderly People; and the 1996 PSSRU Cross-Sectional Survey of Residential and Nursing Homes for Elderly People.
2. The numbers of homes shown in each table are the number of respondent homes which provided complete information, and the numbers of residents are the numbers in these homes. For the 1996 survey, information was collected for samples of permanent and short-stay residents, up to a maximum of 20 individuals in each case, as described in the text. For the purpose of this paper, as in the interim report of the survey (Netten et al., 1997), the sampled residents have been reweighted to represent the total number of residents in the homes which responded with complete information, and no weighting has been applied to adjust for varying selection probabilities and response rates at the home level.
3. Percentages are rounded to whole numbers and may not sum to 100 due to rounding. The symbol '<1' is used to denote non-zero percentages of under one per cent.
4. The symbol 'na' is used to denote information that was not available for the preparation of this paper.

5. The symbol ‘-’ is used to denote inapplicable items of information.
6. The measure of confusion presented in table 5 for the 1996 survey is based on an approximation to the MDS Cognitive Performance Scale (Morris et al., 1994). In the previous surveys, residents were classified as mentally alert, mildly confused or severely confused. The categories of the MDS Cognitive Performance Scale have been grouped into three categories for the purpose of comparison with the information collected in the previous surveys, 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). The terminology used for the grouped MDS Cognitive Performance Scale variable is used in the table.
7. In the 1981, 1986 and 1988 surveys, the behaviour of residents was classified as not disruptive, mildly disruptive or disruptive. For the 1996 survey, antisocial behaviour was classified in terms of frequency, and the terminology used for this variable is used in the table.
8. Information on anxiety was collected for residents in the 1996 survey, corresponding to that collected in the previous surveys, but errors in the dataset prevent the presentation of this information in this paper.
9. Two summary measures of resident dependency are presented in table 6, an approximation to the Index of Independence in Activities of Daily Living (Katz et al., 1963, 1970), and a measure of aggregate dependency originally developed for the 1970 Census of Residential Accommodation (DHSS, 1975). The Index of ADL is based on six functions: bathing, dressing, toileting, transfer, continence and feeding. The DHSS measure is based on mobility, continence, mental state (confusion), and the capacity for self-care in washing, bathing, dressing, feeding and using the toilet, and is defined in Davies and Knapp (1978).

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Table 1.
Age and Sex of Residents in Residential and Nursing Homes for Elderly People, 1981-96, by Type of Home

Information	Local authority residential home		Voluntary residential home		Private residential home		Nursing home	
	1981	1988	1981	1986	1981	1986	1986	1996
Total number of homes	235	42	68	70	153	206	72	167
Total number of residents	10249	1683	1678	1926	2080	3048	1662	6528
Sex distribution (%)								
Males	27	26	30	19	14	21	20	25
Females	73	74	70	81	86	79	80	75
Age group (%)								
Under 65	3	na	5	2	2	3	11	4
65-74	14	na	14	9	9	11	10	12
75-84	42	na	38	43	40	42	34	34
85 and over	40	na	43	47	49	43	44	50
Mean age								
Males	79	na	78	82	81	79	69	79
Females	83	na	84	84	84	83	82	84
Males and females	82	83	82	83	84	82	79	83

Table 2.
Length of Stay of Permanent Residents in Residential and Nursing Homes for Elderly People, 1981-96, by Type of Home

Information	Local authority residential home		Voluntary residential home		Private residential home		Nursing home	
	1981	1988	1981	1986	1981	1986	1986	1996
Total number of homes	235	42	68	70	153	206	72	167
Total number of residents	10249	1683	1678	1926	2080	3048	1662	6528
Length of stay (%)								
Under 1 year	28	31	23	24	39	43	34	33
1-2 years	19	19	14	19	22	26	21	19
2-3 years	14	14	11	15	15	15	15	17
3-4 years	9	9	9	9	10	7	10	11
4-5 years	8	7	8	7	5	3	5	7
5 years and over	22	19	34	27	10	6	15	13
Mean length of stay (mths)								
Males	38	na	53	43	19	20	34	26
Females	39	na	60	53	26	22	31	31
Males and females	39	na	58	51	25	22	32	30

Table 3.
Source of Admission of Residents in Residential and Nursing Homes for Elderly People, 1981-96, by Type of Home

Information	Local authority residential home		Voluntary residential home		Private residential home		Nursing home	
	1981	1988	1981	1986	1981	1986	1986	1996
Total number of homes	235	42	68	70	153	206	72	167
Total number of residents	10249	1683	1678	1926	2080	3048	1662	6528
Source of admission (%)								
Hospital	34	30	8	12	26	32	40	49
Living alone	29	29	47	51	32	32	21	17
Living with others	18	19	17	17	18	14	16	12
Another home	12	11	9	9	17	15	18	16
Sheltered housing	4	8	6	3	1	3	2	4
Other/not known	3	2	13	8	6	4	2	1

Table 4.
Physical Dependency Characteristics of Residents in Residential and Nursing Homes for Elderly People, 1981-96, by Type of Home

Information	Local authority residential home		Voluntary residential home		Private residential home		Nursing home	
	1981	1988	1981	1986	1981	1986	1986	1996
Total number of homes	235	42	68	70	153	206	72	167
Total number of residents	10249	1683	1678	1926	2080	3048	1662	6528
Mobility (%)								
Walk outdoors	30	24	50	45	31	36	15	6
Walk indoors, including stairs	7	8	9	8	12	11	8	5
Walk indoors on level	13	16	8	8	8	9	9	7
Walk indoors with aids	34	34	22	24	25	23	17	9
Walk indoors with help	9	9	6	6	13	12	17	12
Mobile in wheelchair	7	9	4	6	7	6	13	25
Chair or bedfast	<1	-	<1	3	3	4	21	37
Self-care tasks (% needing asst.)								
Wash face and hands	16	19	7	14	18	19	35	57
Bath or wash all over	77	73	45	61	69	66	79	91
Dress	26	30	13	21	30	32	55	79
Feed self	4	5	3	5	8	6	20	28
Use WC	17	22	8	16	23	25	49	73
Transfer (bed/chair)	18	21	10	16	25	23	49	69
Continence (%)								
Continent	60	53	83	72	59	61	43	26
Isolated incontinence	19	23	9	12	21	20	18	27
Urine incontinence	10	13	5	7	9	10	12	12
Faecal/double incontinence	11	11	3	9	11	9	26	35

Table 5.
Measures of Mental State of Residents in Residential and Nursing Homes for Elderly People, 1981-96, by Type of Home

Information	Local authority residential home		Voluntary residential home		Private residential home		Nursing home	
	1981	1988	1981	1986	1981	1986	1981	1986
Total number of homes	235	42	68	70	153	206	72	167
Total number of residents	10249	1683	1678	1926	2080	3048	1662	6528
Confusion (%)								
Intact	45	41	72	62	50	52	42	16
Mild impairment	37	37	21	26	36	32	37	42
Severe impairment	19	21	7	12	14	16	21	42
Antisocial behaviour (%)								
Never/very unusual	70	62	87	88	79	77	76	62
Sometimes (>weekly)	22	26	12	10	17	18	19	23
Frequently (daily)	8	11	2	2	4	5	5	16
Anxiety (%)								
No evidence	41	34	59	61	55	52	52	na
Worries	37	41	30	26	31	32	30	na
Often apprehensive	10	10	6	7	8	9	9	na
Frequently tense	12	15	5	6	6	7	10	na
Depression (%)								
No evidence	57	54	72	71	70	68	62	55
Sadness	27	28	20	19	21	21	25	29
Sadness and weeping	10	12	5	6	6	8	8	10
Depression and guilt	5	6	2	4	2	3	5	6

Table 6.
Measures of Aggregate Dependency of Residents in Residential and Nursing Homes for Elderly People, 1981-96, by Type of Home

Information	Local authority residential home		Voluntary residential home		Private residential home		Nursing home	
	1981	1988	1981	1986	1981	1986	1981	1986
Total number of homes	235	42	68	70	153	206	72	167
Total number of residents	10249	1683	1678	1926	2080	3048	1662	6528
Index of ADL (Katz et al.) (%)								
A (No dependent functions)	21	na	54	38	28	31	16	7
B (1)	45	na	29	36	35	32	21	11
C (2)	12	na	5	7	10	9	8	8
D (3)	5	na	3	4	4	5	6	5
E (4)	5	na	2	4	5	8	11	20
F (5)	6	na	3	5	9	7	17	24
G (6)	3	na	2	4	5	4	15	22
Other (2-5, not C-F)	3	na	1	3	4	4	7	3
DHSS 4-category dependency (%)								
Minimal	25	na	59	45	34	33	15	5
Limited	36	na	22	26	29	26	18	9
Appreciable	11	na	7	9	10	11	14	11
Heavy	28	na	12	20	28	29	54	75