# Analysis of a general practitioner's work in a private nursing home for the elderly

R.A. ANDREW, MRCGP General Practitioner, Darlington, Co. Durham

SUMMARY. A quantitative analysis was made over a fouryear period (1984–87) of the work and time involved for one rural general practitioner in caring for 42 elderly patients living in a private nursing home. The results were compared with those for the rest of the practice. The study showed that the consultation rate for nursing home patients was 50% higher than the rate for the remaining practice patients aged 65 years or over, and more than twice that for the whole practice. The prescribing rate in the nursing home was twice that of the 65+ years group and six times the rate for the whole practice. The hospital referral rate for nursing home patients was twice that of the 65-74 years group, and four times that for the whole practice. The time involved per year in looking after each nursing home patient was nearly twice that for the remaining practice patients aged 65-74 years, and three times that for practice patients aged under 65 years. From this study it would appear that concentrations of elderly patients in nursing homes in areas served by only a few general practitioners can cause considerable increases in workload. This could present problems in the organization of suitable care.

## Introduction

RIVATE nursing homes catering for the needs of the elderly have mushroomed over the past few years, with beds often concentrated in rural areas. In the Darlington health authority area the number of nursing homes increased from five to 14, and bed capacity from 267 to 502 following the implementation of the Registered Homes Act 1984 (Pugh EJ, personal communication). In 1984 the Darlington area had the highest density of this type of accommodation in the northern region with 35.8 places per 1000 people aged 65 years and over — the neighbouring areas of north Tees and south west Durham providing 4.0 and 3.5 places per 1000 elderly people, respectively.

In 1984, 142 of the beds in Darlington were in a rural area served by two general practitioners in two practices. One of the practitioners looked after a long established geriatric nursing home of 100 beds while the author became responsible for the care of 42 elderly patients living in a new nursing home which opened in October 1983. This new home is sited on part of a former Royal Air Force flying station. By alteration and refurbishment of a barrack block, high class accommodation was created for 42 patients, each in single bedrooms. Over the following years other blocks were developed and by April 1988 there were five fully functioning nursing homes of 42 beds each. A further three homes are to be developed to complete a village complex for the elderly with shops, a coffee room, a public house and recreational and occupational therapy facilities.

The aim of this study was to quantify the work involved in looking after the 42 elderly patients in the nursing home compared with the rest of the practice. Four aspects were considered:

© Journal of the Royal College of General Practitioners, 1988, 38, 546-548.

consultation rates, numbers of prescriptions issued, numbers of referrals to hospital services and the time involved in caring for the patients.

#### Method

The practice was divided into the following groups — nursing home patients, remaining practice patients aged 65+ years (for some statistics this group was subdivided into those aged 65-74 years, and 75+ years) and practice patients aged under 65 years. Surveys of the nursing home patients were made in 1985 and 1986 to ascertain the age distribution, their accommodation before coming to the home, and how their fees were funded.

Over the four-year period 1984-87 records were kept of the number of consultations of the different groups. A consultation was defined as a face to face meeting with patients either in the consulting room, in their own home or in the nursing home.

The prescribing rates were recorded; as the practice dispensed 90% of its own prescriptions these figures were readily available. In April 1987 the two practices were amalgamated. Although the doctors kept their own personal lists of patients, and accurate prescribing records were maintained for the two nursing homes, repeat prescribing for the rest of the practice was shared thus producing inaccuracies in the prescribing figures for 1987 and therefore these are not included in the study.

The number of emergency admissions, domiciliary visits, attendances at accident and emergency departments and appointments at outpatient departments over the four-year period were recorded and the total referral rate calculated.

Consultation times were recorded for 1986 and 1987. The surgery consultation times were the time from the beginning of each session to the end divided by the number of patients seen, and visits were from the time of leaving the surgery to returning. Surgery consultations and visits were considered together to give a mean time. It was not possible to subdivide the times into different practice age groups without causing disruption to the consultation and visiting sessions. Times for the nursing home, which is one and a half miles from the surgery, were similarly calculated from leaving the surgery to returning. The time per year required to look after patients in each group was calculated by multiplying the mean consultation rate for the group by the mean time of each consultation, and is another measure of workload.

# Results

Surveys of the nursing home patients in February and December 1985, and in December 1986 showed that 90%, 80% and 80% of patients, respectively, were over the age of 75 years. The December 1985 survey showed that 19 patients came from their own homes, five from the homes of relatives, seven from other nursing homes and 11 from psychogeriatric units. Twelve months later, 23 of the original 42 patients were still living in the nursing home, six had gone to other nursing homes, two had returned to their families and 11 had died. Although this is a private nursing home only one-third of the patients were financed privately, the remaining two-thirds being entirely funded by the Department of Health and Social Security.

R.A. Andrew Original papers

The consultation rates for 1984–87 are shown in Table 1. The nursing home consultation rate was one-third higher than the rate for the remaining practice patients aged 65+ years. The figures for 1987 showed that the nursing home rate was 91% higher than the rate for the remaining practice patients aged 65–74 years, 20% higher than the 75+ years age group, and nearly three times that of the under 65 years age group.

The total hospital referral rates are also shown in Table 1. The rates for nursing home patients were at least twice the rates for the remaining practice patients aged 65–74 years, one and a half times the rates for the 75+ years group and four times the rates for the whole practice.

The prescribing rates for 1984-86 are shown in Table 2. The rate for nursing home patients in 1987 was 36.6 prescriptions per patient per year thus continuing the downward trend. This was 21% less than the 1984 rate. The prescribing rate for nursing home patients was twice the rate for remaining practice patients aged 65+ years and six times the rate for the whole practice.

The time per consultation for nursing home patients and the rest of the practice were similar (Table 3). A survey of the practice consultations and visiting times in 1987 showed that the mean consultation time in the surgery was 6.7 minutes and for visits 14.6 minutes, with the visiting rate being 20% of the consultation rate. The time per year required to look after patients in each group (Table 3) showed that the nursing home patients required one and three-quarter times that of the remaining patients in the 65–74 years group, one and a quarter times that of the 75+ years group, and three times that of the under 65 years group.

#### **Discussion**

With increasing longevity more of the population will become unable to look after themselves and will outgrow the help of relatives who themselves are becoming increasingly older. Wyatt<sup>1</sup> talks of greatgrandparents — not grandparents — being the liability, and the caring relatives, themselves over 50 years of age, thinking of retirement and ease but with no hope of freedom until verging on their own senility. Many of the elderly need some form of institutional care which the National Health Service does not seem able to satisfy,<sup>2</sup> and as a result there has been a marked growth of private nursing homes specifically to cater for their needs.

The development of these homes appears to be haphazard. In the north east of England there is an accumulation of homes in Darlington and the surrounding rural area. One reason for this may be the availability of suitable, reasonably priced property. The study practice now has two general practitioners who, on completion of the proposed nursing home development in their area, will be responsible for more than 400 nursing home beds.

Although the interpretation of the results of this four-year study are limited by the fact that it was confined to one general practitioner and one nursing home with no matched practice group of patients, it would appear that a greater input of work was required looking after the nursing home patients than other practice groups.

Collating the various aspects of the medical care — consultation rates and time involved, referral rates and prescribing rates — it would appear that each nursing home patient was equivalent to three practice patients aged under 65 years. A much larger study involving many general practitioners and nursing homes is required to substantiate, or otherwise, the results of this study. Because of the assumed extra effort required, some general practitioners may be reluctant to become involved in this work, an attitude which could be communicated to the already disadvantaged patients and further add to their problems.

The majority of elderly people in private nursing homes are NHS patients and as for other practice patients general practi-

Table 1. Consultation and referral rates for nursing home patients and other practice groups for 1984-87.

	Number of patients			Annual consultation rate per patient				Annual referral rate per patient						
	1984	1985	1986	1987	1984	1985	1986		1984– 1987	1984	1985	1986		1984– 1987
Nursing home patients Remaining practice patients	42	42	42	42	10.1	8.0	8.1	9.0	8.8	0.71	0.40	0.55	0.57	0.56
aged 65–74 years Remaining practice patients	225	232	245	257	6.2	6.0	5.7	4.7	6.1	0.21	0.22	0.25	0.18	0.21
aged 75+ years Practice patients under 65	170	174	183	169	6.2	6.0	7.5	7.5	6.1	0.31	0.32	0.33	0.33	0.33
years old	2706	2788	2774	2635	3.3	3.4	3.1	3.2	3.2	0.12	0.12	0.12	0.11	0.12
Whole practice Whole practice excluding	3143	3236	3244	3103	3.7	3.8	3.6	3.6	3.7	0.15	0.14	0.15	0.13	0.14
nursing home patients	3101	3194	3202	3061	3.7	3.7	3.5	3.5	3.6	0.14	0.13	0.14	0.13	0.14

Table 2. Prescribing rates for nursing home patients and other practice groups for 1984-86.

	Nu Nu	Annual number of prescriptions per patient					
	1984	1985	1986	1984	1985	1986	1984– 1986
Nursing home patients	42	42	42	46.1	41.6	39.2	42.3
Remaining practice patients aged 65+ years		366	385	_	20.0	20.7	20.3
Practice patients under 65 years old	_	2518	2504	_	4.6	4.4	4.5
Whole practice	2830	2926	2931	7.6	7.1	7.0	7.2
Whole practice excluding nursing home patients	2788	2884	2889	7.0	6.5	6.6	6.7

<sup>&</sup>lt;sup>a</sup>Dispensing patients only.

R.A. Andrew Original papers

Table 3. Time per consultation and time per patient for nursing home and other practice groups for 1986 and 1987.

		time per n (minutes)	Annual time per patient (minutes) <sup>a</sup>				
	1986	1987	1986	1987	1986–87		
Nursing home patients	10.1	8.1	81.9	73.0	77.9		
Remaining practice patients aged 65-74 years	8.1	8.2	45.7	38.8	42.2		
Remaining practice patients aged 75+ years	8.1	8.2	60.6	61.2	60.9		
Practice patients under 65 years old	8.1	8.2	24.9	25.7	25.3		
Whole practice	8.1	8.2	29.1	29.4	29.3		
Whole practice excluding nursing home patients	8.1	8.2	28.5	28.8	28.7		

<sup>&</sup>lt;sup>a</sup> Consultation rate multiplied by the time per consultation (using numbers to three decimal places).

tioners are remunerated under the capitation system of payment. Recognition of the increased workload is acknowledged in the higher capitation fees paid for patients in older age groups — the 65–74 years age group is 29% higher and the 75+ years age group 60% higher than the ordinary rates. If the findings of this study are substantiated, nursing home patients should attract capitation fees that are three times higher than the under 65 years age group.

In the present economic climate it is doubtful whether any extra revenue would be forthcoming from the DHSS. However, as the patients are housed and cared for in the private sector perhaps the extra fees could be funded by the nursing home management at either individually or nationally agreed rates.

The amount of medical care required by nursing home patients depends to some extent on the quality of the nursing staff at the home and the organization of the delivery of care. For the first three months after the home in this study was opened visiting was on demand, necessitating an average of 12 separate attendances and 38 patient consultations each month. Following discussions with experienced senior nursing staff a decision to make regular weekly visits, with extra visits only for strict emergencies, reduced the monthly attendances to an average of eight with 31 consultations. By good liaison with experienced nursing staff many problems arising between visits were dealt with over the telephone.

Although it is the right of each patients to have the doctor of his choice this may not be the most economical use of doctor time. In 1980 a survey of local authority homes managed by Strathclyde social services department found that the potential number of general practitioners visiting almost equalled the number of residents, to the annoyance and frustration of the nursing staff.3 Nurses prefer to deal with only one or two doctors so that an agreed policy of care can be developed. This situation is easy to achieve in a rural setting where there is little or no choice of doctor but in urban areas requires goodwill and understanding between patients and doctors. That it can be achieved has been demonstrated at the NHS experimental nursing home at Chapletown outside Sheffield, where one doctor is in sole charge of the home. As this is an NHS home the appointment was made by the health authority, but when private nursing homes apply for registration the appropriate health authority could make a similar recommendation and also recommend that the doctor appointed plays an official part in the organization and running of the home. This might mean the individual patient foregoing some right of choice of doctor but could be for the greater benefit of the residents as a whole.

#### References

- 1. Wyatt EP. Personal view. Br Med J 1979; 2: 1434.
- Humphreys HI. Health care in homes for the elderly. In: The Royal College of General Practitioners. Members' Reference Book 1987. London: Sabrecrown Publishing, 1987: 305-309.

- Masterton G. The role of local authority homes in the care of the dependent elderly. MD thesis, University of Glasgow, 1982: 138-139.
- 4. Young P. Paving the way to a new style of long-stay care. Geriatric Medicine 1984; 14: 18-20.

## Acknowledgements

I thank Dr E.J. Pugh and Mr G. Phillips for providing the statistics concerning private nursing home beds in the north east of England.

# Address for correspondence

Dr R.A. Andrew, Felix House Surgery, Middleton St George, Darlington, Co. Durham DL2 1AA.



The Royal College of General Practitioners

# Terminal Care: the Role of the Primary Health Care Team

The Royal College of General Practitioners, in collaboration with Napp Laboratories Ltd, is holding a study day on terminal care, at Sheffield University on Friday 14 April 1989.

The study day aims to explore the psychological aspects of terminal illness, advice and support for the patient and carer, bereavement, as well as the role of the hospice and other associated voluntary organizations.

It is hoped that delegates will include general practitioners, geriatricians, district medical officers, community and practice nurses, health authority, community health council and family practitioner committee personnel as well as representatives from the voluntary organizations involved.

The cost of the study day is £20.00 per delegate. For further details, please contact Janet Hawkins, Projects Office, Royal College of General Practitioners, 14 Princes Gate, Hyde Park, London SW7 1PU (01-581 3232).