A survey of access to medical services in nursing and residential homes in England

Caroline Glendinning, Sally Jacobs, Alison Alborz and Mark Hann

SUMMARY

Background: *Residential and nursing homes make major demands on NHS services.*

Aim: *To investigate patterns of access to medical services for residents in homes for older people.*

Design of study: *Telephone survey.*

Setting: *All nursing and dual registered homes and one in four residential homes located in a stratified random sample of 72 English primary care group/trust (PCG/T) areas.*

Method: *A structured questionnaire investigating home characteristics, numbers of general practitioners (GPs) or practices per home, homes' policies for registering new residents with GPs, existence of payments to GPs, GP services provided to homes, and access to specialist medical care.*

Results: *There were wide variations in the numbers of GPs providing services to individual homes; this was not entirely dependent on home size. Eight per cent of homes paid local GPs for their services to residents; these were more likely to be nursing homes (33%) than residential homes (odds ratio [OR] = 10.82, [95% CI = 4.48 to 26.13],* P*<0.001) and larger homes (OR for a ten-bed increase = 1.51 [95% CI = 1.28 to 1.79],* P*<0.001). Larger homes were more likely to encourage residents to register with a 'home' GP (OR for a ten-bed increase = 1.16 [95% CI = 1.04 to 1.31],* P *= 0.009). Homes paying local GPs were more likely to receive one or more additional services, over and above GPs' core contractual obligations. Few homes had direct access to specialist clinicians.*

Conclusion: *Extensive variations in homes' policies and local GP services raise serious questions about patient choice, levels of GP services and, above all, about equity between residents within homes, between homes and between those in homes and in the community.*

Keywords: *nursing homes; frail elderly; health services accessibility.*

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Introduction

SINCE the early 1980s the independent residential and nursing home sector has become, and remains, a major provider of long-term care for older people.[1,2]

Despite the current lack of direct involvement by the NHS in purchasing or providing long-term care services, residential and nursing home residents make major demands on NHS services, particularly primary and community health care. Dependency levels of residents have risen sharply.[3,4] Furthermore, caring for older people in nursing and residential homes increases the workload of general practitioners, compared with the care needed by older people in their own homes.[5-10] Indeed, the General Medical Services Committee of the British Medical Association has called for the removal of this group of elderly patients from GPs' core contractual responsibilities.[11] The demands on NHS services are likely to increase yet further, with the investment of £900 million in intermediate care services for older people by 2003/2004; nursing homes and similar facilities are considered appropriate locations for such services.[12]

However, there is little systematic information about access to medical care for nursing and residential home patients. The extent to which GPs have already reacted to increasing workloads is unknown. Of particular concern is the possibility that some GPs may charge homes directly to secure medical cover for residents.[13,14]

Therefore, investigations were made on the arrangements for access to medical services in a nationally representative sample of nursing, residential and dual registered homes in England. It was important to find out what arrangements homes had with local GPs and other clinicians, what services these practitioners provided, and what the implications of these various arrangements were for patient choice and continuity of care.

Method

The survey was conducted within the 72 English primary care groups/trusts (PCG/Ts) used in the National Tracker Survey of PCG/Ts.[15] This random sample of PCG/Ts, stratified by NHS region, provided a nationally representative sampling frame from which to draw the present sample and allowed data from the two surveys to be analysed together. Using these 72 areas, a sample was drawn of all registered nursing and dual registered homes, and one in four randomly selected residential homes (of which there was a far greater number). Homes were identified from Laing and Buisson's database[16] and matched to their respective PCG/T areas by postcode. This produced an effective sample of 765 homes.

A structured questionnaire was administered by telephone to the home proprietor or manager. The questionnaire cov-

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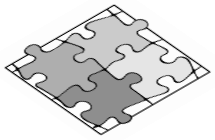

What do we know?

Despite evidence of the increasing dependency of residents in nursing, residential and dual registered homes, there has been little systematic research on the provision of NHS services to this very frail group of patients. There is some evidence of increased GP workload, but little information about how this affects access to medical care. There is some unpublished evidence of homes paying local GPs for their services.

What does this paper add?

The study demonstrates that there are wide variations across England in arrangements within and between homes for registering new residents with a local GP, in payments made to local GPs, and in the range and levels of services provided by GPs within homes.

ered other areas of health care as well as medical services (reported elsewhere) and data were collected using computer-assisted telephone interviewing (CATI). Each interview took approximately 30 minutes.

A response rate of 75% was achieved. This represented 570 homes in all — 174 nursing homes, 221 residential homes, and 175 dual registered homes. Non-response was generally owing to the subject being too busy or unavailable despite numerous call-backs.

The data were analysed using the statistical software STATA version 6.[17] The data were weighted to compensate for the one-in-four sampling of residential homes, giving an overall denominator of 1233, i.e. [174+(4 x 221)+175]. We were unable to identify non-responders from the database due to strict confidentiality procedures used by the data collection agency. We therefore had to assume comparable characteristics between responders and non-responders and could not compensate for any non-response bias. Statistical tests were all conducted at the 5% level. Logistic regression was used for most analyses; other statistical tests used are described in the body of the text. Odds ratios (ORs) quoted in the text are given with 95% confidence intervals and, where appropriate, are adjusted for all significant factors.

Results

Home size and type

Figure 1 shows the distribution of home size by home type in this sample. Generally, dual registered homes (median number of beds = 40, interquartile range [IQR] = 30 to 53) were larger than nursing homes (median = 33.5, IQR = 24 to 50), which in turn were larger than residential homes (median = 23, IQR = 15 to 35). This mirrors the national picture for the care home industry.[18]

Patterns of GP involvement

The relationship between the registration type or size of homes and the numbers of local GPs and practices providing care for their residents was not straightforward. The number of GPs serving each home ranged from one to 50 (median = 7, IQR = 4 to 12) and the number of practices

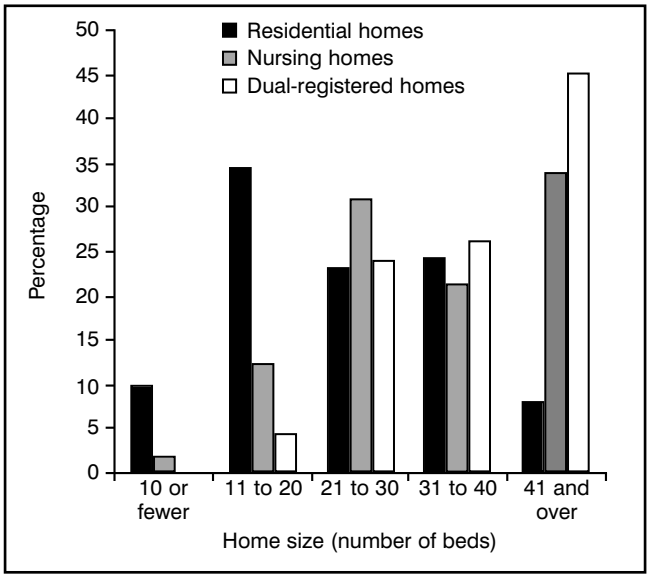

Figure 1. Distribution of home size (number of beds) by home type (registration).

ranged from one to 20 (median = 4, IQR = 2.75 to 6). As expected, there was a weak, but significant, rank correlation between the number of beds per home and the number of GPs serving the home (r_s = 0.174, P<0.001). This relationship persisted in residential homes (r_s = 0.381, P<0.001) and dual registered homes (r_s = 0.164, P = 0.040), but, interestingly, not in nursing homes, where the relationship was negative but non-significant (r_s = –0.109, P = 0.167).

In addition, a minority of homes (10%; 122/1233) reported that all their residents were registered with only one GP practice; these homes were significantly more likely to be nursing homes (20%; 34/174) than either residential homes (odds ratio [OR] = 2.74 [95% CI = 1.26 to 5.93], P = 0.011) or dual registered homes (OR = 2.40 [95% CI = 1.07 to 6.77], P = 0.034).

These unexpected patterns prompted investigation of homes' policies governing their residents' medical care.

Payments to GPs and patient choice

Overall, 105/1233 homes (8.5%) said they paid one or more GPs for the medical services provided to their residents (median number of GPs paid per home = 4, IQR = 2 to 8); the total amounts paid by each home ranged from under £500 to over £5000 a year (modal response was '£1000 to £1999'). Three-quarters (81/105) of homes paying GPs did so as part of a formal contract with the GP or practice. Paying a GP for providing services was significantly more common in nursing homes (33%; 57/174) than either residential homes (OR = 10.82 [95% CI = 4.48 to 26.13], P<0.001) or dual registered homes (OR = 5.21 [95% CI = 2.51 to 10.80], P<0.001), and in larger homes (OR for a 10-bed increase = 1.51 [95% CI = 1.28 to 1.79], P<0.001).

Most homes (53%; 649/1233) encouraged new residents to retain their own GP or left the matter entirely to residents' choice (29%). However, a substantial minority of homes (10%) encouraged residents to register with the 'home' GP. This was more likely in larger homes (OR for a 10-bed

increase = 1.16 [95% CI = 1.04 to 1.31], P = 0.009) although there was no effect of home type. One in five homes that paid a GP explicitly encouraged new residents to register with that GP, compared with only one in ten homes that did not pay GPs. Although, independently, 'payments for GPs services' was a significant predictor of 'home GP' registration (P = 0.032), this factor became non-significant (P = 0.168) upon adjusting for home size. These findings may explain the unexpected negative correlation between the number of GPs and number of beds in nursing homes described above.

As so many homes encouraged residents to retain their 'own' GP or left the choice of GP to residents, many homes had mixed arrangements, with some residents receiving medical care from paid GPs and others receiving care from GPs who received no payment.

Services provided by GPs

Home managers selected from a pre-determined list which services were provided by the GPs with whom their residents were registered. Table 1 shows the variation in services provided, both between and within homes.

Almost one-third (392/1233) of homes reported receiving all five of the services specified in the questionnaire, while, at the other extreme, 4% reported receiving only one type of service. Homes paying GPs were more likely to receive all five services (versus fewer than five; 78/105) than those not paying GPs (314/1128; OR = 7.12 [95% CI = 4.12 to 12.33], P<0.001), although there was no relationship between the amount paid and the number of services received. There were also significant differences with regard to registration policy ('home' GP versus other policy: OR = 2.46 [95% CI = 1.22 to 4.97], P = 0.013). In this case, homes that encouraged residents to register with the 'home' GP were significantly more likely to receive all five services (53%; 68/129) than those which did not (29%; 323/1099). The second column in Table 1 also indicates variations in the services provided by different GPs visiting the same home.

Patient visits when requested, either during or outside normal surgery hours, are minimum expectations for medical care in homes and were, not surprisingly, widely available to residents. However, among the homes paying some or all of their visiting GPs, 64% (67/105) said these payments covered visits on request to the home during surgery hours and 65% said they covered visits on request out of surgery hours, suggesting that homes believed they were paying for services which GPs are already contractually obliged to provide. Worryingly, in a small number of nursing and residential homes, independent of whether or not the home paid any GPs, our responders suggested that these services were not available at all to residents.

In contrast, regular medical and medication reviews and regular home-based surgery consultations are additional services which, arguably, acknowledge the higher levels of illness and dependence of home residents, compared with that of many older people living at home. All three of these additional services were significantly more likely to be provided to homes which paid GPs than homes which did not (Table 2). Although home type and size were, independently, significant predictors of service provision in all three cases, after adjusting for 'payment' these differences became non-significant.

Access to specialist medical services

Eighty-three per cent of homes (1019/1233) could contact a geriatrician and 92% a psycho-geriatrician when needed, in both instances usually via the residents' GP; only a minority of homes had direct contact with a geriatrician (5%) or psycho-geriatrician (12%). There were no differences in the availability of specialist medical services between homes of

Table 1. Services provided by GPs to home residents.

Service provided by GPs	Percentage of homes in which service is provided (n = 1233)		
	By all GPs	By at least some GPs	By no GPs
Visits during surgery hours on request	82	93	7
Visits out of hours on request	78	93	7
Regular reviews of medication	65	79	21
Regular medical reviews of named patients	45	71	29
Regular surgery held in home	21	38	62

Table 2. Availability of additional medical services in homes, according to whether payments are made to GPs.

Type of service	Homes in which service provided (%)			
	Payment (n = 105)	No payment (n = 1128)	OR (95% CI)	P-value
Regular surgery held in home	91 (87)	38 (34)	12.68 (6.08–26.42)	<0.001
Regular medical reviews of residents	96 (91)	777 (69)	4.80 (2.39–9.64)	<0.001
Regular reviews of residents' medication	96 (92)	863 (77)	3.50 (1.58–7.77)	0.002

different sizes or types, or between homes that provided post-operative and rehabilitative care and those that did not.

Discussion

We believe this to be the first national survey of access to medical services for older people in nursing and residential homes in England. It also benefits from a high response rate not often achieved in this setting.

These data confirm GPs' primary responsibility for the medical care of care home residents; even though homes did have access to specialist clinicians, this was usually only via a GP referral.

We have now demonstrated the relationship between the numbers of GPs and practices involved in residents' care and homes' policies towards residents' registration with a GP. In areas where homes experience difficulties in registering new residents with already overburdened GPs, there may be no option but to register all new residents with a GP with whom the home has entered into a contractual arrangement. Indeed, there may be advantages in encouraging residents to register with one GP or practice that provides medical care for all the home's residents. Homes will build close working relationships with one or two GPs who are committed to providing care for the residents of the home and who may provide a better quality of medical care by offering a wider variety of services. However, the majority of homes that encouraged residents to retain their own GP and/or left the matter entirely to residents' preference were maintaining the principle of patient choice. Retaining an existing GP also provides valuable continuity in the care of a frail older person who has experienced the major life change of admission to institutional care, particularly if this has followed a period of hospitalisation.

These data also raise some major equity considerations. A sizeable minority of homes made payments to some or all of their residents' GPs. It is not surprising that this was more common in larger homes and in nursing homes where demand on GPs will be greater. It is also not surprising that homes take measures to secure the services of GPs in these circumstances. However, as small businesses, homes are forced to recoup this cost from residents' fees. Around a third of residents are wholly responsible for funding their own care home placement and may well be subsidising state-funded residents.[18] Therefore, a significant minority of residents are contributing towards the cost of their general medical care which is provided free of charge to everyone else. Moreover, although these payments often covered what could be seen as additional primary care services, such as regular reviews and GP surgeries in the home, in many cases they also covered basic GP services, such as visits on request, which are necessary for highly dependent older people who are unable to attend GP surgeries.

Conclusion

The medical care of frail older people will continue to present challenges for primary care as PCG/Ts develop intermediate care facilities in their locality. This study indicates two urgent priorities for PCG/Ts in addressing these challenges. First, PCG/Ts' responsibilities for developing systems of clinical governance must extend to cover the range of services provided by GPs to residential and nursing homes. Secondly, PCG/Ts urgently need to review the numbers of homes making payments to GPs and practices; while there is a strong argument for recognising the additional workload involved in caring for nursing and residential home residents, current arrangements are highly inequitable. PCG/Ts' budgetary flexibilities enable them to make appropriate reimbursement arrangements for the additional care involved. Thus, a system of remuneration from PCG/Ts would be preferable to *ad hoc* arrangements between homes and GPs. Moreover, this could provide a mechanism for improving the standards of medical care throughout the care home sector without compromising patient choice.

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