Daily home visiting in one general practice: a longitudinal study of patient-initiated workload

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SUMMARY. New requests for home visits performed by one general practitioner were recorded every weekday over 13 years from 1977 to 1989. Overall, a steady reduction in patient-initiated demand for visits was seen. However, longitudinal analysis by age showed that this was statistically significant only in patients aged under 65 years, for whom there was a 71% decrease. There was no significant change in the rates of visits requested for elderly (65–74 years old) and very elderly (75 years and over) patients. In the last year of the study 75% of daily visiting was requested by 18% of the patients, that is by the elderly and very elderly, a sector of the population which is increasing. The findings challenge the prediction that home visits will decline until they eventually disappear. General practitioners in the UK still need to maintain a domiciliary service to their elderly patients.

Introduction

VISITING and treating patients in their own homes is a continuing part of primary medical care in the UK. At its best the home visit is convenient for the patient and can be rewarding for the doctor whose diagnosis can then encompass environmental influences.[1-5] However, home visits are much more time consuming than surgery consultations and some requests for visits are unreasonable.[3,5-9] Nevertheless it is known that the majority of patients will judge their doctor by his or her willingness to visit them at home.[2,10]

It is clear that British general practitioners now visit fewer patients during their working day. The national morbidity surveys showed that the proportion of consultations which were in the home had fallen from 18% in 1970/71 to 14% in 1981/82, while total consultations had risen by 9%.[11,12] Evidence is also available from the north of England of a 41% drop in overall daily visiting (31% drop in new visits) between 1969 and 1980[13] and a compilation of trends in home visiting obtained from various other sources also showed a consistent decline between 1950 and 1978.[14] Other conclusions from the studies reported on home visiting in the UK[3,5,6,9,13,15-20] are inhibited by the confounding factors of inter-practice variations and, more seriously, by discrepancies in the definition of home visits.[9,13,16,18,20,21]

The decline in home visiting was even causing speculation in the late 1970s that 'house calls' would disappear from British general practice[1,2] and that the resulting free time could be diverted to other tasks.[22] It is usually assumed that the decline has continued in the 1980s but there is no reliable evidence for this. The future of home visiting in the UK remains unclear. This paper reports a longitudinal study of new visits requested and performed during each working day over an extended period by one general practitioner. The aim was to test the hypotheses, first, that overall patient demand for this service has continued to decline in the last decade; and secondly, that the changes vary in different age groups.

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Method

The practice

The practice is semi-rural: 20% of the patients live three miles or more from a central, purpose-built health centre in a small market town. The group practice expanded from four doctors to five in 1987 but it remains organized on a personal list basis. During the working day patients are visited by the doctor with whom they are registered even if this should be geographically inconvenient and conflict with other work.

All requests for new visits received during office hours are recorded by one of a team of receptionists: they are not vetted by the practitioners although patients making obviously inappropriate demands are invited to speak to the relevant doctor if he is available. New visits are performed on the day they are accepted, generally between the end of morning surgery and the beginning of afternoon surgery. The practice is approved for training: trainees customarily visit patients whom they already know or patients who are selected by their trainer for educational purposes, or they 'replace' principals temporarily absent from the practice. Elderly patients moving into sheltered or residential accommodation within the practice boundary remain registered with the same doctor.

Data collection

The information used in this study has been recorded in diaries since 1977. New requests for weekday visits to patients on the author's list were recorded, daily, with the identification, sex, age, and address of those individuals concerned. Only those visits performed by the author himself were included in the study. Doctor-initiated visits, for example, to patients newly discharged from hospital or to patients who were recently bereaved were omitted. Likewise, out of hours visits and those performed at weekends and bank holidays were not part of this study since they are performed by the partners in rotation, the 'duty' doctor covering the whole of the practice population at these times.

During each study year there were 45 effective working weeks. The author was never absent for more than four consecutive working days (once). For each study year the patients visited were subdivided by age according to the quarterly age–sex registration details provided by the family practitioner committee: 0–64 years; 65–74 years; and 75 years and over. The number of visits performed in each age band in each study year was then divided by the number of registered patients in the respective age ranges (as at each 1 July) to derive the number of visits per 1000 patients per annum.

Statistics

The regression coefficients, and hence the regression equations were calculated for each of the trend lines. The *t*-test was used to ascertain whether any of the regression coefficients were significantly different from zero.

Results

The number of patients registered, the number of actual visits and the number of visits per 1000 patients registered in each age group during each of the study years is shown in Table 1. This shows that there has been an 84% increase in the propor-

tion of registered patients aged 75 years and over from 4.4% of the total registered population in 1977 up to 8.1% in 1989. A larger proportion of visits were requested by or on behalf of the elderly and very elderly compared with those aged 0–64 years. While total annual visiting rates fell from 219 to 139 per 1000 patients per annum (37% decrease) the decrease is mostly the result of a steady drop in the numbers of visits requested for patients aged under 65 years from 147 to 43 per 1000 (71% decrease). The correlation coefficient here is 0.93 which is significantly different from zero (t = 8.86; df = 11; $P<0.001$). The downward trends for visits to the elderly and very elderly were slight and the respective correlation coefficients were not significantly different from zero.

The number of new visits each year to patients aged 65 plus years and under 65 years were calculated as a percentage of the visits for all ages for that year (Figure 1). This shows that there has been a reversal of the proportional visiting rates, with the proportion of all visits to the 65 plus years age group rising from 42% to 75%, while the proportion of visits to the under 65 year olds has fallen from 58% to 25%.

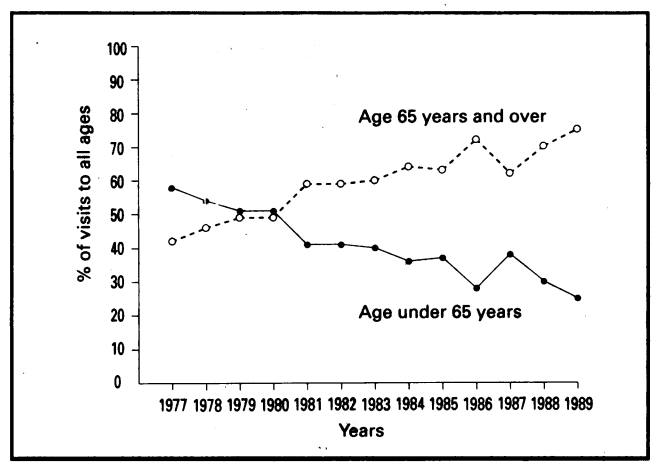

Figure 1. *Proportion of new visits to all age groups each year which were made to patients aged 65 plus years and under 65 years (see Table 1 for number of visits per annum).*

Discussion

The variety of ways in which general practitioners organize their practices can often disguise important changes in primary care. To demonstrate recent trends requires large, multi-practice studies which are difficult to organize and are expensive. Alternatively findings must be extrapolated from individual observers in practices where confounding factors can be overcome. In either case, the data have to be collected over a substantial time period. In the context of home visiting by British general practitioners, there are few such investigations reported.[5,17,18] This study supports the hypothesis that the overall downward trends in visiting rates in British general practice are not seen in every age group. Although the findings are not necessarily representative even of similar semi-rural practices, the population and organization of the practice were fairly stable over the study period. In addition, the mean rate of 0.18 visits per patient per year is similar to the rate of 0.19 quoted by McAvoy,[23] the only other study which reported on the same parameters.

The different trends in visiting rates to older and to younger patients is consistent with an overview formed from previous, cross-sectional studies.[11-13] The consistent downward trend, in this study, of fewer visits requested for younger and middle-aged patients seems to be a new finding. Although grouping together all patients from 0–64 years is unsatisfactory, it was unavoidable because the lack of a refined age–sex register in the early years of the study meant that standard family practitioner committee data had to be used. Although changes in illness patterns in youth and middle-age have been demonstrated elsewhere,[11,12] these are but small when compared with the 71% drop in visits shown here. The trend may express changes in patients' expectations and needs related to their growing ability to contact their doctor and travel independently; both telephone ownership and multiple car ownership per household in the UK rose by 57% during the period of this study.[24,25]

If the declining trend of visits to the under 65 year olds in the practice should continue unchanged for a further five years then home visits during the working day to young and middle-aged patients would cease in this practice. In fact an absolute cessation of such visits seems unlikely, but a complete reversal of the proportion of all visits each year to older and to younger patients has already occurred. The findings could also suggest that younger patients are seeking immediate help at other times of the day: reports of a high workload of out of hours visits continue to appear.[26-28]

Table 1. Number of new visits and number of new visits per 1000 patients per annum by age group of patients.

	All ages			Age 0–64 years			Age 65–74 yrs			Age 75+ yrs		
Year	No. of patients registered	No. of visits	No. of visits per 1000 patients	No. of patients registered	No. of visits	No. of visits per 1000 patients	No. of patients registered	No. of visits	No. of visits per 1000 patients	No. of patients registered	No. of visits	No. of visits per 1000 patients
1977	3002	656	219	2601	383	147	268	115	429	133	158	1188
1978	3069	586	191	2641	318	120	278	135	486	150	133	887
1979	2994	573	191	2562	293	114	277	89	321	155	191	1232
1980	3049	588	193	2611	301	115	273	126	462	165	161	976
1981	2898	505	174	2460	206	84	271	119	439	167	180	1078
1982	2940	550	187	2491	228	92	265	123	464	184	199	1082
1983	2961	557	188	2497	223	89	268	111	414	196	223	1138
1984	2881	507	176	2416	182	75	255	106	416	210	219	1043
1985	2960	484	164	2469	181	73	269	111	413	222	192	865
1986	2916	448	154	2398	126	53	296	94	318	222	228	1027
1987	3024	506	167	2495	190	76	296	102	345	233	214	918
1988	2879	515	179	2370	153	65	278	99	356	231	263	1139
1989	2718	379	139	2234	95	43	263	81	308	221	203	919

The results of the study imply that the author is requested to visit the homes of working age families on his list, on average, less than once every eight years. The theoretical implications discussed by Pereira Gray in his 1977 Mackenzie lecture[1] are already a reality in this sector of society: the circumstances of these patients' homes are less familiar than before. By contrast, opportunities to study the domestic circumstances of the growing elderly population have not diminished. Assuming that they live alone, patients aged 65–74 years in this practice are now visited once every 2.5 years; and patients aged 75 years and over are visited about once a year. The present work patterns of general practitioners in locations popular with retired people may represent the future of home visiting for more of us. For example, there are twice the national averages of elderly and very elderly people in Worthing, Sussex, and the practitioners in the town have reported a very high visiting rate.[29] Home visiting will probably not die out in British general practice; we shall continue on our 'rounds' but the patients we shall see will be older.

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