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Trends in GP home visits

Background
To date there has been no detailed analysis of the profile of home visit patients, and the extent of any changes over time in Australian general practitioner home visiting patterns.

Aims
The article aims to provide a profile of current provision of home visits by Australian GPs, investigate whether there has been a decline in such services over time, and surmise about causes of changes in service provision and their impact.

Methods
We analysed home visit claims over the past decade. Data were extracted from Medicare Benefits Schedule statistics on services claimed and benefits paid for home visit items, for 1997–2007, stratified by item category and patient demographics.

Results
The rate of home visits decreased 51% in a decade, from 15.8 per 100 persons in 1997 to 7.7 in 2007. The majority of patients (60%) receiving home visits were aged 65 years and over in 2007, including 22% aged 85 years and over.

Discussion
There has been a clear decline in GP home visits over the past decade. This is problematic in the context of a large and growing population of older Australians. Strategies are needed to better support this function in general practice, and/or ensure that alternative providers are meeting the need for these services.

Home visits are provided by general practitioners for acute problems, particularly outside of normal consulting room hours, and to monitor and treat patients who have difficulty travelling to the surgery, such as the frail elderly. Home visits have traditionally been viewed as an important and defining feature of general practice.[1]

Declines in home visits by GPs have been reported in many European countries[2–4] and concerns have recently been expressed about similar decreases in Australia.[5,6] Data from the 2006–2007 Bettering the Evaluation and Care of Health (BEACH) study indicates that home visits represented less than 1% of Medicare claimable encounters (0.9%) in 2006–2007 (95% CI: 0.7–1.1).[7] This has decreased significantly since 1998–1999 when home visits were 1.9% of encounters (95% CI: 1.7–2.2). Approximately three-quarters of GPs participating in BEACH in 2006–2007 reported providing no home visits.[6]

The time consuming nature of home visits, the relatively poor remuneration associated with them, a large part time workforce, and concerns about personal safety may all contribute to increasing reluctance among GPs to undertake this type of consultation.[6,8,9]

Any decrease in home visiting rates by GPs may impact on the health of the elderly, in particular, the frail elderly. The majority of older Australians aged 65 years and over live in private homes (93.8%), with almost one-third in lone person households.[10] The number of people aged 65 years and over is expected to more than double by 2036, which will represent 24% of the total population.[10] In this context, it is important to review current and emerging trends in health service provision relevant to this group of patients.

Methods

Data were extracted from Medicare Benefits Schedule (MBS) statistics on claims for GP home visits for the period 1997–2007.[11] Medicare statistics do not include services provided by hospital doctors to public patients in public hospitals or services that qualify for a benefit under the Department of Veterans' Affairs National Treatment Account. Data were obtained on the number of services and benefits paid. Included items referred to 'home visits' or specified the location of services as 'a place other than consulting rooms, hospital, residential aged care facility or institution'.[12] Items were grouped into three categories:

- standard – home visits during standard working hours
- after hours (nonurgent) – home visits outside of standard working hours other than those for problems of an urgent nature, and
- urgent after hours – home visits after hours for problems of an urgent nature.

Items in the second category, 'after hours (nonurgent)', were introduced in 2005 to provide better remuneration for services provided outside of normal working hours. These items numbers are for vocationally registered (VR) GPs (5003, 5023, 5043, 5063) and other nonreferred doctors (5220, 5223, 5227, 5228).

Data were stratified by year and calculated for calendar years. Data on patient age and gender were also extracted for 1997 and 2007. Data on all claims by GPs during this period were obtained to calculate the proportion of all services and benefits (total nonreferred professional attendances excluding practice nurse items) represented by home visits.[13,14] Population data from the Australian Bureau of Statistics were used to calculate per capita rates of service provision.[15,16] Benefits paid across the period were converted to 2007 dollars to adjust for inflation, using a ratio of Consumer Price Index values in each year.[17]

Results

Number and type of services

The rate of home visits by Australian GPs decreased from 15.8 per 100 persons in 1997 to 7.7 in 2007 – a decrease of 51% (*Figure 1*). Larger decreases were evident in the first half of this decade, falling to 9.8 by 2002 (38% decrease), with a further 22% drop between 2002 and 2007.

The type of home visits has changed over time. Standard home visits have shown the greatest decline (70%), from 14.8 per 100 persons to 4.5. This category represented 93% of all home visits a decade ago, but 58% in 2007. Urgent after hours visits grew from 1.0 per 100 persons in 1997 to 2.6 in 2007 (150% increase). After hours visits represented 42% of all house calls in 2007, comprised of 34% urgent after hours visits and 7% nonurgent after hours visits. The introduction of the new item numbers in 2005 for after hours (nonurgent) visits was associated with a slowing in the rate of decline in home visit rates, with only a 7% change between 2004 and 2007.

As a proportion of the total number of MBS items claimed for nonreferred professional attendances, home visits declined over the decade, from 2.8% in 1997 to 1.5% in 2007.

The benefits paid for home visits under the MBS show a decreasing trend from 1997 to 2004 in 2007 dollar values (*Figure 2*). After the introduction of new after hours items in 2005, benefits paid for standard home visits continued to decline, to $56 million in 2007, but benefits paid for urgent after hours visits increased. In part this is due to adjustments to the benefit values during this period. Benefit values for urgent after hours items increased in real terms since 2002 (earliest available comparable data) while benefit values for standard home visit items decreased in real terms (*Table 1*).

Figure 1. Rate of home visits by GPs 1997–2007, by type[11]

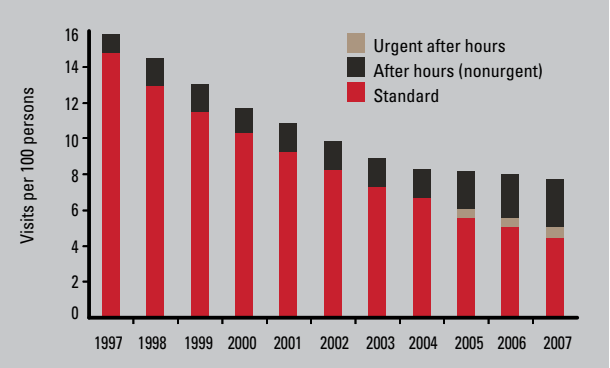
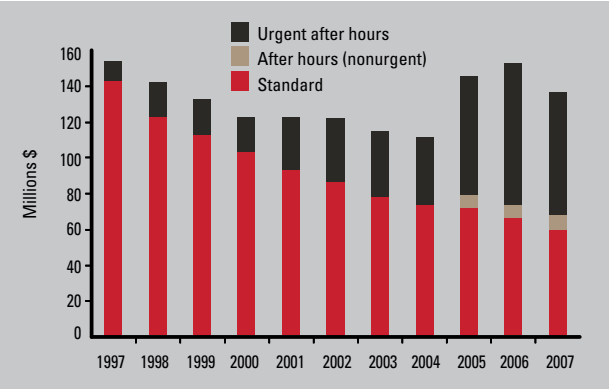


Figure 2. Benefits paid in 2007 dollars for home visits by GPs 1997–2007, by type[11]



As a proportion of GP income from fee-for-service attendances, home visits represent 3.0% in 2007, down from 3.6% in 2002 (earliest available comparable data).

Patient profile

Sixty percent of patients receiving home visits from GPs in 2007 were aged 65 years and over, and patients aged 85 years and over comprised 22% of all home visits. Rates for standard home visits were notably higher in older age groups (65+) compared to younger, with a high of 78 visits per 100 persons in 2007 for those aged 85 years and over. Standard home visit rates in all age groups were lower in 2007 than 1997, with rates in older age groups dropping markedly. Rates for after hours nonurgent visits in 2007 showed less variation between age groups, with all rates less than 5 per 100 persons. Urgent after hours visit rates in 2007 showed a similar pattern by age to standard home visits, although with lower rates in all age groups than standard home visits. Urgent after hours visits in 2007 were higher in all age groups than they were in 1997.

Discussion

Our analysis confirms that there has been a clear decline in the rate of home visits by Australian GPs over the past decade. This decline was particularly marked in the first half of the decade for standard visits during normal business hours and for patients in older age groups

Table 1. Real change in home visit item rebates 2002–2007

MBS category/ item	Item number[12]	Benefit 2007*	Benefit difference 2002–2007†
Standard – VR GP			
Level A (brief)	4	$37.95	– $0.01
Level B (standard)	24	$55.75	– $0.11
Level C (long)	37	$85.25	– $0.20
Level D (prolonged)	47	$114.65	– $0.33
Standard – other nonreferred			
Level A (brief)	58	$24.00	– $3.47
Level B (standard)	59	$33.50	– $4.84
Level C (long)	60	$51.00	– $7.38
Level D (prolonged)	65	$73.00	– $10.56
After hours urgent			
(8–11 pm and 7–8 am)	1	$114.95	+ $10.33
Unsociable hours (11 pm to 7 am)	601	$135.45	+ $10.34

* Benefits paid as applied to a single patient, and taken from rates in November 2006 Medicare Benefit Schedule book[21]

† Difference calculated after converting 2002 benefits to 2007 dollars. 2002 benefits taken from November 2001 MBS book[22]

(65+ years). There were changes in the composition of home visits paid through MBS during this period, with fewer standard home visits and more after hours visits. It is possible that these changes in composition reflect altered claiming behaviour rather than changes in actual clinical practice. However, even if there has been some transfer between items, there has still been an overall decline in visiting rates. The pace of decline slowed quite markedly from 2005, following the introduction of new after hours MBS items, which coincided with increases to the rebates for the existing after hours items (1 and 601). The decline was not arrested by these increases however, suggesting that either the price adjustments were insufficient as incentives for these services (a view which is consistent with our finding that most rebates have not increased in real terms in the past 5 years) and/or that other disincentives such as safety concerns or time pressures, continue to influence GP behaviour.

Trends found in our study for GP home visits in Australia are similar to trends seen in the Netherlands and Germany.[3,4]

Our study does not include health assessments conducted in the home (MBS items 700, 706, 716, 719). These services, which are generally for older patients, have grown to a rate of 0.6 per 100 persons in 2007 since their introduction in 1999.[11] However, they are prevention orientated rather than treatment focused as is the case for some home visits in this study. Anecdotally it appears that many home visits for health assessments are performed by practice nurses rather than GPs, but at present, the manner in which data are collected does not enable the actual provider to be distinguished.

Our data provide no indication of the type of clinical conditions treated in home visit consultations, except at the broadest level of item categories. Further research would be required, for example with data extracted from the BEACH datasets, to explore this. Our data also do not indicate whether the rise in after hours visits are being made by specific after hours or locum services rather than a patient's usual GP. Medicare statistics for the Practice Incentives Program (PIP) indicate that only 27% of PIP registered practices provide all after hours care for practice patients, with the remaining three-quarters outsourcing this.[18] The number of after hours home deputising services has grown rapidly in recent years, supported by new government initiatives.[19] The provision of after hours care by deputising services rather than a patient's usual GP highlights the necessity of good communication and integration between different providers to ensure continuity of care.

The observed decline in house calls raises questions about whether care for the type of cases traditionally dealt with in these visits (such as urgent problems occurring after hours, and elderly patients with limited mobility) has been partially transferred to other service providers. Possible alternatives include hospital emergency departments; ambulance services; other general or specialist agencies that provide visits to homes, such as palliative care services and district nursing services; or telephone services such as the National Call Centre Network. Figures on ambulance services shows that the number of patients per capita treated at home, but not transported, increased 68% between 2001–2002 and 2006–2007.[20] This category of patients has increased from 9.8% of ambulance service patients 5 years ago to 13.8% in 2006–2007. There is clearly scope for further investigation into ambulance service provision to examine trends over time in the profile of patients treated (eg. age distribution) and clinical conditions managed. It is unclear whether any such transfer of care is a considered and coordinated strategy by GPs, or a result of patients seeking services elsewhere without the involvement of their GP. Again this highlights potentially important implications for integration and continuity of care.

The need for home based medical care services is not likely to diminish in the coming years. Strategies are needed either to better support this function in general practice, or ensure that alternative providers are meeting the need for these services – probably both. It seems clear that without additional strategies, the decline in GP home visits is unlikely to be reversed, with potentially undesirable consequences for quality of care and continuity of care for vulnerable patients. These strategies should be underpinned by a clear policy regarding what is best for patients by maximising continuity of care and ensuring both efficient and appropriate use of health system resources across agencies and sectors.

Conflict of interest: none declared.

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