

Number of patient contacts undertaken during extended opening hours at a community pharmacy

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AIM • To record patient contacts within a community pharmacy during the extended hours of opening (the extended hours are contracted via Sheffield health authority).

DESIGN • Patient contacts were recorded over two 14-day periods in the spring and autumn each year from 1997 to 2001 during contracted extended hours only. Each patient contact was documented and included: prescription item(s) dispensed; advice given in the pharmacy (including that relating to syringe and needle exchange); advice given by telephone; over-the-counter medicines sales.

SETTING • A pharmacy close to Sheffield city centre.

RESULTS • The results show that prescriptions accounted for only 35% of patient contacts recorded. Over 25 per cent of contacts called for advice, a third of

which was via the telephone. It was estimated that the workload of "free" advice via this pharmacy, in extended hours alone, during the whole of 2001, equated to 59,943 patient contacts. This is a major component of the service provided by the pharmacy. NHS Direct was introduced in the area in November 1999 and appears to have resulted in a reduction in telephone advice and an increase in face-to-face advice. The estimated figures for 2001 indicate that it would have cost the NHS about £290,000 if the calls made to the pharmacy were routed through NHS Direct.

CONCLUSION • The pharmacy was well used throughout the periods monitored and the health authority was obtaining excellent value from its investment of £25,359 for this service in 2001. Despite the perception that community pharmacy is all about the dispensing of NHS prescriptions, in this case, 65% of patient contacts revolved around advice and self treatment.

Little research has been published that looks into the volume or breadth of contact with patients or their representatives within a community pharmacy. In the days of the cost plus contract, community pharmacies were regularly the subject of time and motion studies by the Department of Health. The aim was to discover the percentage of time devoted to National Health Service matters to enable the allocation of NHS "operating costs". This system ceased in 1989. More recently, surveys undertaken by academics and consumer groups have tended to look at specific products and services. However, the breadth and total volume of health-related work undertaken within a pharmacy has been largely ignored.

Changes in NHS regulations in 1995 introduced locally devolved services that allowed health authorities to contract with community pharmacies to provide an extended hours pharmacy service. To assess whether this service represents good value for money it would be sensible for health commissioners to devise a means of monitoring and recording

patient contact within pharmacies providing this service.

For the pharmacies themselves, it is equally important to demonstrate value for money. When faced with the inevitable disappearance of ring-fenced budgets, pharmacy needs to have an evidence-based case to enable it to hold on to, or even increase, its share of the local financial cake.

The aim of this project was to provide a simple method of recording patient contacts within an extended hours pharmacy and to consider the potential savings to the NHS by having this service available.

METHOD

Patient contacts were recorded in a pharmacy close to Sheffield city centre over two 14-day periods in the spring and autumn of each year between 1997 and 2001. The first period was in May and included the May Day public holiday, the second period was at the end of October or beginning of November. Patient contacts were monitored during the contracted extended hours only. These were: Monday to Saturday 5.30pm to 10pm and Sundays and public holidays 10am to 8pm.

Patient contacts were recorded under the following headings: prescription item(s) dispensed; advice given in the pharmacy (including that relating to syringe and needle exchange); advice given by telephone; over-the-counter medicine sales.

A simple form was devised with a tick representing one patient contact and columns to denote the current time period. These forms were positioned at strategic points (tills, dispensary computers, telephones) before the extended periods. Findings were then collated on a second form each morning. Staff were given both verbal and written instructions.

RESULTS

Over the 20 weeks of recording, a total of 63,437 patient contacts was recorded. Of these 15,768 patient contacts (23.9 per cent) represented advice, 5,885 (9.3 per cent of total contacts) of which were by telephone (Table 1).

The total number of patient contacts recorded in the 2001 survey show a 50 per cent increase on that recorded in the 1997 survey. Four out of the five years show more patient contacts in the spring period (which includes the May Day public holiday) compared with the autumn period (see Table 1).

Table 2 shows the average number of patient contacts per hour for each day over the five-year period. This varies from 72 contacts on a Friday to 98 contacts on a Tuesday.

Table 3 looks at weekdays during 2001, with the average number of patient contacts split into the hours of the day. The average number of patient contacts ranged from 85 contacts between 9pm and 10pm to 122 contacts between 7pm and 8pm.

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TABLE 1: PATIENT CONTACTS RECORDED DURING EXTENDED HOURS OF OPENING

	May 97	Nov 97	May 98	Oct 98	May 99	Oct 99	May 00	Oct 00	May 01	Oct 01	Total
Total patient contacts	5,655	5,034	5,789	5,277	6,300	6,134	6,317	6,848	8,170	7,913	63,437
Total advice	1,102	1,172	1,249	1,098	1,505	1,786	1,664	1,581	2,244	2,367	15,768
Total advice as % of contacts	19.5	23.3	21.6	20.8	23.9	29.1	26.3	23.1	27.5	29.9	24.9
Telephone advice	623	469	585	502	696	639	536	592	656	587	5,885
Telephone advice as % of contacts	11.0	9.3	10.1	9.5	11.0	10.4	8.5	8.6	8.0	7.4	9.3
Prescriptions dispensed									2,893	2,813	
Prescriptions dispensed as % of contacts									35.4	35.6	

Finally, Table 4 illustrates the number of patient contacts recorded on Sundays and on the May Day public holiday in 2001. Patient contacts peaked in the first hour of the Sunday (10am to 11am) with an average of 131 contacts. On the bank holiday Monday, the peak was between 1pm and 2pm when the figure reached 191 contacts. The lowest average number of patient contacts was recorded between 4pm and 5pm on the Sunday (71 contacts) and between 5pm and 6pm on the Monday (50 contacts).

DISCUSSION

In 2001, the number of patient contacts during extended hours equates to a staggering level of approximately 210,000 contacts over a full year. Equally surprising is the fact that 28 per cent of these can be classified as advice (which is free in pharmacies). Over a quarter of that advice was sought by telephone, and this is in line with an earlier unpublished survey undertaken at the same pharmacy which indicated that almost 500 requests for information were received by telephone each week (during the full opening hours). This required over 17 hours of staff time.

The data collection method devised for this study provides a simple method of accumulating information on the number and type of patient contacts taking place. There is no doubt that the method is not completely accurate and most participants indicated that an under-recording of patient contacts occurred, particularly at busy times. However, this approach does give a figure that can be used to justify the funding of the service to those purchasing it and to indicate the value for money that is being achieved.

A recent report from the College of Health¹ provided estimates of call rates to health services, which were used in the evaluation of NHS Direct first wave sites² (see Table 5).

It seems that the figure of 75 (for the pharmacist) estimated for the whole population is extremely low. If it is assumed that the pharmacy surveyed serves the whole of Sheffield, the telephone query call rate per

TABLE 2: TOTAL NUMBER OF PATIENT CONTACTS RECORDED AND AVERAGE NUMBER OF PATIENT CONTACTS PER HOUR

Day	Total contacts	Total hours	Average contacts per hour (1997–2001)	Average contacts per hour (2001)
Saturday	6,622	90	73.6	107.1
Sunday	16,248	200	81.2	96.1
Monday	9,630	117.5	82.0	104.8
Tuesday	8,789	90	97.7	99.3
Wednesday	8,129	90	90.3	131.1
Thursday	7,233	90	80.4	118.1
Friday	6,508	90	72.3	87.8

TABLE 3: AVERAGE NUMBER OF PATIENT CONTACTS RECORDED DURING EACH HOUR OF EXTENDED OPENING (WEEKDAYS) 2001

Day	6pm–7pm	7pm–8pm	8pm–9pm	9pm–10pm
Monday	111	123.7	84.7	69.3
Tuesday	106.8	99	113	81
Wednesday	156	145.8	128.3	98.8
Thursday	94.8	149	123.3	111
Friday	83.3	101.3	69.5	78
Saturday	95	114.8	130.8	71
Total	2,476	2,810	2,513	1,967
Average number of patient contacts	107.7	122.2	109.3	85.5

1,000 residents per year would be approximately 27 for extended hours of opening only. Bearing in mind there are two Sheffield pharmacies contracted to provide an extended hours service and a total of 106 pharmacies in the city, the call rate would be considerably higher for all pharmacies throughout all hours.

It is interesting to note that the amount of advice provided by telephone has dropped since the introduction of telephone advice via NHS Direct. It would also be worthwhile to compare the results from the pharmacy surveyed with other pharmacies since it has a wide selection of health information leaflets on display and provides computer generated patient information leaflets with dispensed medicines. In 1999, a touch screen customer information system was also introduced. It could be that these factors, along with the fact that it has provided an extended hours service for over 50 years,

influence the number of requests for information and advice.

Patient contacts during normal weekday extended hours show a peak on Tuesday evenings. However, this could be because the period in question included May Day bank holiday Monday, which resulted in a shift of patient contact to Tuesday when surgeries reopened. The busiest period was from 7pm to 8pm, and the quietest from 9pm to 10pm, but even the quietest hour showed an average of 86 patient contacts.

Looking at Sundays and the May Day bank holiday in 2001, there is a considerable increase in patient contacts, particularly during the first hour of opening from 10am to 11am when an average of 166 patient contacts was recorded for the May Day bank holiday and 131 for Sundays. In addition, the quietest hour of the whole survey was found between 5pm and 6pm on the

TABLE 4: AVERAGE NUMBER OF PATIENT CONTACTS RECORDED DURING EACH HOUR OF EXTENDED OPENING (SUNDAYS AND PUBLIC HOLIDAYS) 2001

	10am–11am	11am–12am	12am–1pm	1pm–2pm	2pm–3pm	3pm–4pm	4pm–5pm	5pm–6pm	6pm–7pm	7pm–8pm
Sundays	131	107.5	122	125	80.3	76.5	71.3	79.5	73.8	92.5
Bank holiday Monday	166	161	154	191	111	89	78	50	55	51

TABLE 5: ESTIMATES OF CALL RATES TO HEALTH SERVICES¹

Service	Estimated call rate per 1,000 population per year	Source (reference number)
Out-of hours GP		
co-operative	100	3
Pharmacist	75	3
999 Ambulance	73	4
NHS Direct	56	2
Daytime GP		
telephone consultation service	50	5
Out of hours community		
nursing and mental health	40	1
A&E department	12–30	3
Health information service	9	1

May Day holiday, with an average of 50 patient contacts.

In 2001 Sheffield Health Authority invested £25,359 in a service level agreement with this pharmacy to provide “additional hours dispensing services” as follows:

- 1 5.30pm to 10pm on weekdays and Saturday evenings
- 1 10am to 8pm on Sundays and public holidays
- 1 3pm to 5pm on Christmas day

Pressure on the budgets of health commissioners are such that it is important for those providing services to be able to demonstrate that they provide good value for money. If there was not a pharmacy open during these times, there is no doubt that a percentage of the people using this service would have to access other services, such as on-call pharmacist services, GP deputising services, and hospital accident and emergency departments. It is impossible to predict accurately the number of people who would do this, but for the purpose of this exercise, I will estimate that only 10 per cent would need to access other services at an average cost of £20 each. Based on the 2001 data, this would result in a cost to the NHS of £418,000 per annum.

The volume and breadth of advice sought from community pharmacies is largely unidentified, mainly because it is a free service, so figures are not required for budgetary purposes. Consequently, because the level of uptake is rarely identified, the role goes largely unappreciated by other mem-

bers of the primary care team.

The Government recently introduced NHS Direct. In a parliamentary written answer on 11 June 2002, the Health Minister, David Lammy stated: “The average cost of a call to NHS Direct in 2001–02 was about £17.92”. If the amount of telephone advice identified during the 2001 sur-

vey was extrapolated over the year and had been routed via NHS Direct, the cost to the NHS based on the Minister’s estimate would have been £289,569.

During the period of these surveys a pilot NHS walk-in centre opened (March 2000) about two miles from the pharmacy although this appeared to have little effect on the use of the extended hours pharmacy service. It is therefore interesting that the “National evaluation of NHS walk-in centres”,⁶ makes the following comment when considering whether these centres are currently configured in the best way to achieve their aims: “The most obvious alternative model would be to employ more nurses in existing general practices, or possibly in

pharmacies, to provide similar services but without the need to build entirely new facilities. Such a model is likely to be more economical and easier to implement . . . further development of this idea would be for one practice or pharmacy to be designated as a walk-in centre in each town, receiving extra funding to employ nurses in return for wider opening hours.”

Ghalamkari *et al*⁷ have already drawn attention to the fact that giving more advice in a community pharmacy often results in fewer sales. There are clear implications from that work, and from our own work, concerning adequate remuneration and investment in community pharmacy. Other work at this pharmacy has shown that customers rate the availability and the convenience of an extended hours pharmacy service highly.

In conclusion, this survey shows that the extended hours service at the pharmacy surveyed is well used by the public for obtaining prescribed medicines, advice (both by telephone and in person) and for purchasing medicines over the counter. It would seem logical and economically sensible to convert this type of pharmacy into an NHS walk-in centre.

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