

# The Dundee out-of-hours cooperative: preliminary outcomes for the first year of operation

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## SUMMARY

The Dundee out-of-hours cooperative (DDOC) was the first of its kind to be developed in a city in Scotland. In its first year of operation, the key features of the cooperative were that (a) two doctors could deal with the large majority of out-of-hours calls for a population of just under 100 000 patients, (b) only one third of calls required a home visit, (c) most calls were handled within a period of time acceptable to patients, (d) seven out of 10 patients rated the service equal to or better than previous services, and (e) there were extended opportunities for general practitioners (GPs) involved in the scheme to meet with other colleagues during out-of-hours work.

Keywords: out of hours; questionnaires.

## Introduction

By 1992, 73% of GPs in the United Kingdom wanted to opt out of the traditional 24-hour commitment to patient care. Given the increase in the demand for out-of-hours care, a need for change was therefore apparent.<sup>1-3</sup> The aims of this report are to describe the setting up of an out-of-hours cooperative (DDOC) in the city of Dundee, and to illustrate the main findings during the first year of operation.

## Method

In 1994, 51 of the 119 GPs in Dundee created a cooperative for out-of-hours care for 91 000 patients. The out-of-hours period was divided into shifts of six to eight hours, with a minimum of two doctors working on each shift, other than the period between midnight and 8 a.m. Every shift had a receptionist and a security guard driver for each of the cooperative's two vehicles.

Patients requesting care were directed by an answer phone message to the telephone number of the assessment centre. A receptionist took details and the doctor(s) decided whether to offer the patients advice, a consultation at the centre, or a home visit. Details of all out-of-hours calls were recorded for analysis.

A short questionnaire was devised and distributed to a one-in-

20 sample of patients requesting care. Semi-structured interviews were conducted with participating doctors to assess their experiences of the new system.

## Results

In the first year of operation, 24 746 calls were made to the service, a monthly average of 2064. The annual contact rate was 272 per thousand patients.

The two doctors working on each shift, with back-up if required, coped adequately with out-of-hours calls from a population of just under 100 000 patients; 9234 patients (37%) received telephone advice, 6867 patients (23%) were seen at the centre, and 8520 (34%) received a home visit. Four out of 10 patients who were visited at home were seen within 30 minutes of making the call, and three quarters were seen within an hour. In all, 2724 patients (11%) were admitted to hospital. Thirty per cent of these patients were aged between 50 and 75 years.

Five hundred and eighty-three patients returned their questionnaires. Of these, 519 (89%) were able to contact a doctor without too much delay. Three hundred and thirty-two (57%) of the responders preferred to contact DDOC as opposed to their own GP, and 414 (71%) rated the service as either better than or comparable to previous services experienced.

The semi-structured interviews with participating doctors showed that DDOC members welcomed the opportunity to confine their out-of-hours duties to a finite period of time. The GPs also found that acting as 'pairs on call' improved communication between practices, and they unanimously supported the concept of being driven to house calls by a security guard.

## Discussion

One third of out-of-hours calls were dealt with by telephone advice, which is in keeping with the results of previous work in this field.<sup>4</sup> Around one in four patients were prepared to attend a health care facility, which contrasts sharply with recent results from a London cooperative where only 7% of patients were seen at the centre.<sup>5</sup> Nine out of 10 patients were able to contact the doctor without delay, and three quarters of home visits were seen within a reasonable period of time. Only two doctors were required for the majority of shifts, which was substantially less than previous practice-based arrangements.

The response rate to questionnaires was low, but constraints on funding and time lapses prevented a more detailed follow-up of patients. The GPs indicated that the new system provided a more satisfying method of arranging clinical care and allowed more contact with colleagues. Steps have now been taken to expand the cooperative to include all GPs in the city.

## References

1. Sutherland VJ, Cooper CL. Job stress, satisfaction, and mental health among general practitioners before and after introduction of new contract. *BMJ* 1992; **304**: 1545-1548.
2. Pitts J. Hours of work and fatigue in doctors. *JR Coll Gen Pract* 1988; **38**: 2-3.
3. Salisbury C. Visiting through the night. *BMJ* 1993; **306**: 762-764.

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**Table 1.** Type of response to patients' requests.

Response	Number of patients (%)
Telephone advice	9234 (37)
Attended health clinic	6867 (28)
Home visit	8520 (34)
Information not available	143 (1)
Total	24 764 (100)

4. McCarthy M, Bollam MJ. Telephone advice for out-of-hours care in general practice. *Br J Gen Pract* 1990; **40**: 19-21.
5. Salisbury C. Observational study of a general practice out-of-hours cooperative: measures of activity. *BMJ* 1997; **314**: 182-186.

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