

# After day surgery: the impact on community healthcare services

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The interface between the hospital and the community is central to the effective expansion of day surgery. This audit examined the workload generated by 450 patients during the 2-week period following discharge after day surgery from hospitals in two health districts. Attitudes of community healthcare professionals were also canvassed. There was a significant, but not overwhelming, call on the community services and the personnel involved were broadly supportive of increasing day surgery activity. The study has identified various factors which might enable patients to manage their own care at home with greater confidence.

Key words: Day surgery, community services

## Introduction

For day surgery patients the sense of continuity of care between the community and the hospital is all important<sup>1</sup>. For this to be realized close collaboration between practitioners in each area is required. There needs to be agreement as to the nature and extent of the contribution which each will make.

In the UK reports have concentrated on hospital aspects of day surgery and recent information relating to the impact on the community has been largely anecdotal. In 1985 the Royal College of Surgeons' guidelines suggested that only 2% of cases need involve a community nurse<sup>2</sup>. The field trials of a day surgery patient satisfaction questionnaire developed for the Audit Commission reported limited use of community nurses and social services<sup>3</sup>. Only 6% of patients expressed a desire for more of these formal care services. About a quarter saw their general practitioner within a month of surgery. This is very similar to the national average<sup>4</sup>. However, Stott expressed concern that day surgery might be transferring a considerable workload and therefore cost to the community services<sup>5</sup>. He then reviewed 448 consecutive day surgery patients in South Glamorgan and concluded that day surgery did not result in a major increase in workload<sup>6</sup>.

In 1992 the East Anglian Regional Health Authority

and the Royal College of Surgeons commissioned a regionwide audit of day surgery services. The Project Team comprised a consultant surgeon, a senior regional nurse, a research registrar and a research nurse. The audit encompassed a range of studies (see Acknowledgements), one of which related to community services. The purpose of this enquiry was to monitor the extent to which community health services were involved with day surgery patients in the 2-week period following their operations. A secondary concern was the journey home and whether or not this occasioned problems for patients. The attitudes of professional groups in the community were also explored.

## Methods

In order to examine the contacts between day surgery patients and community staff a 2-week diary sheet that was easy for patients to complete was required. This was designed by the Audit Project Team in consultation with community liaison nurses and senior community nurse managers. The sheet was tested by the research nurse in an orthopaedic clinic where patients were returning for a consultation 2 weeks after operation. Completion proved simple and no changes were made to the design.

One NHS Trust comprising hospitals on two sites agreed to carry out a pilot study for a 2-week period in March 1993. Permission to undertake the study was obtained from the Local Audit Committee. The chairman of the Local Medical Committee and the Senior Community Nurse Manager were consulted. A briefing meeting was held with senior nurses in the hospitals concerned and the research nurse then discussed the audit with staff on the three wards to be used.

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**Table 1.** Adults and children in the respondent group

District	No. of children (%)	No. of adults (%)
A	44 (16.5)	225 (83.5)
B	46 (25.4)	135 (74.5)

The pilot study demonstrated the feasibility of continuing to a larger enquiry. The same NHS Trust agreed to participate in the main study and the number of wards was increased to five in order to encompass a greater range of day surgery. A second NHS Trust in another district of East Anglia also agreed to participate. Four wards were included at one hospital site. In both Trusts day surgery was carried out from a designated ward and also from general wards, with all patients going to the main theatre suite.

Permission to undertake the main study was sought as before and similar briefing activity conducted. Each ward distributed a diary sheet, covering letter and stamped addressed envelope for reply to every patient attending for day surgery in a 5-week period during June and July 1993. Patients having endoscopy, haematology or pain relief procedures and anyone who required overnight admission were excluded. Children were included and parents asked to return the diary sheets. Patients having a termination of pregnancy were invited to participate but were reassured that no further contact would be made with them. Diaries were to be returned at the end of the 2-week period to the Audit Office in Cambridge and not to the hospital.

The study added considerably to the workload of nurses and clerical staff who were asked to record patient details in a ward diary which was sent to Cambridge each week. Telephone reminders were made by the research nurse to any patient who had consented to give a telephone number and who had not returned their diary within 3 weeks of discharge. All non-responders were sent a written reminder. Data was analysed using the EpiInfo epidemiological package.

As a background to the main community audit the views of general practitioners, community nurses and practice nurses were sought by means of personal interview and questionnaire. They were asked to comment on any problems associated with the current level of day surgery activity and on the potential increase in day surgery in the future.

## Results

Five hundred and twelve diary sheets were distributed and 450 were returned, giving a response rate of 88%. Table 1 shows the proportion of adults to children in the respondent group. The distribution of operations amongst respondents is shown in Table 2. There were no significant differences between respondents and non-respondents in terms of the procedures carried out.

**Table 2.** Distribution of operations in the respondent group

Procedure	No.	%
D&C	66	14.9
Cystoscopy	55	12.4
Laparoscopy	52	11.7
Other gen. surgery	41	9.2
Grommets	40	9
Dental	23	5.2
Vasectomy	22	5
Other orth.	21	4.7
Other ENT	19	4.3
Carpal tunnel decompression	15	3.4
Other urology	15	3.4
Termination of pregnancy	12	2.7
Other ophthalmic	12	2.7
Circumcision	11	2.5
Hernia	9	2
Breast lump	9	2
Other gynae.	7	1.6
Squint	6	1.4
Other	5	1.1
No data	10	0.9

Individual procedures accounting for less than 2% of the total have been included in composite groups.

**Table 3.** Categories of contacts with community healthcare professionals

Category	%
Expected	58
Unexpected	37
Incidental	5

### The journey home

Ninety-two per cent of patients reached home within 1 h of leaving hospital. Nine patients spent more than 2 h on the journey and complications such as pain and sickness presented problems for 15% of patients. Laparoscopy and circumcision were associated with a high risk of complications.

### Once at home

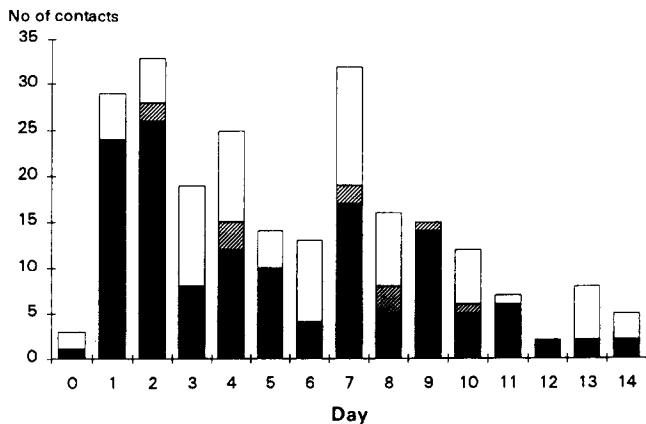
Contacts with health professionals were divided into expected, unexpected and incidental (Table 3). In all 39% of patients made contact once discharged from hospital on one to four occasions (Table 4). The majority (58%) of these contacts were expected and resulted from instructions given by the hospital. One in ten patients had been asked to see their general practitioner to receive histology results, discuss further management or to seek advice about returning to work. Other community healthcare professionals were also consulted, though to a lesser extent (Table 5). Requests to visit a practice nurse were for suture removal or dressing changes. Referral by the hospital to community nurses varied according to the district, involving 2% of patients in one and 9% in

**Table 4.** Number of contacts by individual patients

No. of contacts	% of patients
0	61
1	28
2	6
3	3
4	2

**Table 5.** Proportion of contacts with each professional group

Profession	%
GP	56
Practice nurse	25
District nurse	18
Health visitor	1

**Figure 1.** Frequency and nature of contacts in the community. □ Unexpected; ▨ incidental; ■ expected.

another. These requests were largely to confirm satisfactory progress. Contacts usually entailed a visit but on a few occasions represented only a telephone conversation. Incidental contacts arose from matters unrelated to the day surgery episode.

#### *Unexpected contacts*

In the first 48 h after discharge only 10 patients contacted their general practitioner. A significant number of unexpected contacts were made with health professionals in the first week after discharge (Figure 1). Throughout the 2-week period wound problems and the need for effective pain relief were the main reasons prompting patients to seek professional help, usually from the general practitioner. Practice nurses had a total of 57 contacts, 14 of these were on days one and two. Only three contacts were unexpected. Community nurses made a total of 41 visits. Only two visits resulted from referral by the general practitioner for wound dressing.

#### *Children*

Ninety-one children were included in the enquiry and 15% of families recorded unexpected difficulties following surgery. It was policy in both districts to inform health visitors of a hospital admission for all children up to the age of 16. No parents requested a visit from a health visitor, two families had a check telephone call and one recorded a visit.

#### *Professional attitudes*

Community nurses in the two districts audited expressed no concern about their current involvement with day surgery patients nor about referral patterns. The nurses in one district had some anxiety about a possible increase in day surgery activity. Amongst practice nurses opinion varied as to whether day surgery was increasing their workload. The problems they encountered were common to all surgical patients and included discharge on a Friday without dressings for the weekend and difficulty in interpreting instructions given to them by patients. The practice nurses in one district received no written nursing communication from the hospital.

The majority of general practitioners were in favour of day surgery. They saw advantages in the reduction of waiting times and only a few were concerned by the number of postoperative complications that had come to their attention. Half of the general practitioners indicated that the information reaching them about individual patients was sketchy and delayed and more than half felt that the hospital should be the first point of contact for patients in the immediate postoperative period. Suggested initiatives included nurse liaison posts, a hospital-based helpline staffed by nurses and direct access for general practitioners to admit patients after selected procedures.

#### **Discussion**

In order to measure the involvement of community health services following day surgery the patient as 'key player' was used as the source of information for this audit. An alternative approach would have been to access existing records or to initiate day surgery-specific record keeping amongst the four professional groups. Currently relevant information is not readily available making such an exercise costly and time consuming. At present a minority of community nursing services give day surgery patients a separate code. This community audit demonstrates that patients are willing and able to supply simple, precise information about their experiences at home and suggests that such an approach could be usefully repeated. Important factors in achieving an acceptable response rate include the commitment of ward staff when distributing audit forms, the associated encouragement given to patients and carers to participate and the involvement of a nurse in the telephone reminders to non-respondents.

An hour's journey has been recommended as a criterion

ion of acceptance for day surgery. There has been a gradual extension of this limit; an understandable tendency in a rural area like East Anglia. The majority of patients in the audit reached home within 1 h but some lengthy journeys were reported. The wisdom and safety of increasing the journey time criterion requires continual scrutiny. With as many as 15% of patients being troubled by distressing symptoms on the journey home there is a need to change practice and re-audit the result.

The unexpected contacts with community health professionals in the first 48 h after discharge are of particular interest. They might not have been necessary had the patient been admitted for short stay surgery. The work generated in this period was not, nor was it felt to be, excessive. It could be that better counselling and appropriate prescription of analgesia might reduce the number of patients requesting advice. The free comments made by patients underline this. While the majority expressed views strongly supportive of day surgery, 15% did point to some deficiencies relating to advice on aftercare, precise information about sutures and an appropriate indication of the amount of postoperative pain to expect. There is a well recognized tendency for patients to expect to recover more quickly after day surgery<sup>7</sup>. If this is not realized disappointment and anxiety may ensue. It would seem essential to offer realistic advice to enable patients to appreciate that any operation requires a recuperative phase, whether carried out on an inpatient or a day case basis.

One hospital did not refer any children for community nursing support. The majority of the unexpected contacts relating to children came from this hospital and on four occasions concerned problems following circumcision. There could be reason for hospitals to review their policies and if they do not already do so, consider community nursing referral or a follow-up telephone call for some paediatric day surgery. Alerting health visitors in good time prior to admission would enable them to flag up any difficulties that might be anticipated from their previous experience with families.

General practitioners often expressed concern that day surgery may overload nursing services. At present this does not seem to be a major issue for the nurses themselves. Day surgery units can measure the workload they generate for community and practice nurses. What is frequently unknown is the workload resulting from secondary referral from the general practitioner. This audit suggested that such a phenomenon is of negligible significance at present.

Both nurses and doctors complained of the lack of information from hospitals. It is essential that after day

surgery patients leave hospital with written information relating to their procedure including advice regarding any intervention that is expected to be necessary by the community healthcare team. A copy of this information should be sent to the GP.

### Conclusion

Day surgery in the two districts of East Anglia audited is creating a considerable but not overwhelming workload for community healthcare professionals. General practitioners have more concerns than nurses at the prospect of an increase in day surgery although they take a broadly supportive stance. Improved counselling and more appropriate prescription of analgesia would enable patients to manage their care at home with greater confidence and with less recourse to professionals. It may be more difficult to develop cohesive strategies for aftercare in hospitals without a dedicated day surgery unit. As day surgery expands the balance of inputs from the community and the hospital will need to be kept under continuing review and discussion about the transfer of opportunity costs is likely to increase.

### Acknowledgements

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