



Caring for the carer: an audit of the day surgery service for carers within the Wessex region of England

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Abstract

The provision of the best possible service to the lay-carer by day surgery units is essential with the expansion of this type of surgery. The carers' preparation, ease with which they can fulfil their role and duration they were required for, was audited in nine day case units. Often journey time exceeded 30 min and parking was a problem in most units (20% overall). No written instructions, inadequate medication directions and lack of contact number was found in 10.5, 8.6 and 9%, respectively. In some specialities there was a failure to communicate the amount of care required: especially noted was dental surgery and varicose vein surgery. © 2000 Elsevier Science B.V. All rights reserved.

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1. Introduction

Most published surveys of day surgery services concerns the quality of the service the patient receives [1–4]. Few have focused on what may be the weakest link in the chain, namely the carer or home-nurse. The British Association of Day Surgery (BADS) survey (1996) [5] has estimated there would be a marked increase in the number of day surgery procedures occurring by the year 2000. The most important reason given for this was purchaser demand. The formation of Primary Care Groups in the UK will probably call for even more emphasis on day surgery, as there are obvious significant financial and logistic advantages over inpatient treatment. The service will call upon the good will of the general public to undertake the lay-carer role. The reciprocal service the lay-carer provides for the NHS cannot be overstated.

To successfully advance day surgery into the next millennium it is imperative to ensure the lay-carer is given the very best service possible. Adequate provision of facilities for the carer at the day surgery unit (DSU), essential information and support once they have left the units with the patients must be ensured.

A previous audit from the authors' own unit (unpublished), has revealed inadequacies in these areas for the lay carer. The results revealed several problem areas that were not expected. The role of the carer and provision of services has now been reaudited. The unique co-operation of day surgical units within the Wessex region of Southern England has enabled the audit to be extended to include eight other hospitals.

2. Objectives

To identify inadequacies in day surgery facilities and information for the lay-carer. To assess the duration of care required for various commonly performed surgical procedures, and identify any problems.

3. Audit standards

Carers should experience no difficulties with performing their role, escorting the patients home and understanding the nature of surgery, or prescribed medications.

They should be aware of the length of time they are likely to be needed.

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Table 1
Location of each unit participating in the audit

Basingstoke	Poole
Bournemouth	Swindon
Winchester	Salisbury
Dorchester	Southampton
Isle of Wight	

4. Setting

Nine DSUs in Wessex.

5. Methods

In June/July 1998 the DSUs issued questionnaires to 50 consecutive escorts/carers of patients who had received a general anaesthetic for their day surgery. The carers were asked to complete the form when their role as the carer was completed, postage-paid envelopes were provided. The questionnaire is shown in Appendix A.

A database was created and the anonymity of the respondents was preserved. The contributing units are listed in Table 1. The units have been subsequently coded so their individual identities are withheld.

6. Results

There were 200 questionnaires returned from the nine DSUs, resulting in an overall response rate of 44%. There was a wide variation in observed response rate between the units (22–68%). The mean journey time was 26.4 min (SD 19 min). In several units some patients had much longer journey times (Fig. 1). Problems with parking were experienced by 20% of all respondents (Fig. 2). This was usually due to a shortage

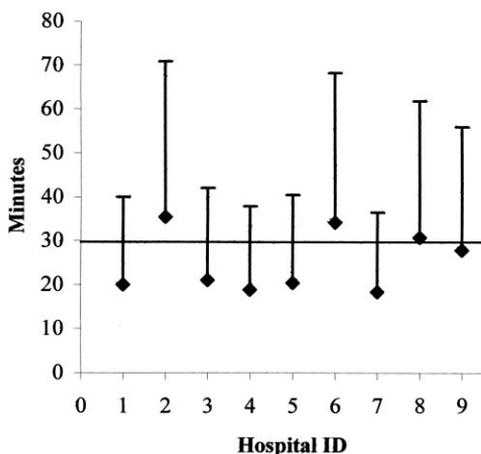


Fig. 1. Mean journey times (+1 SD).

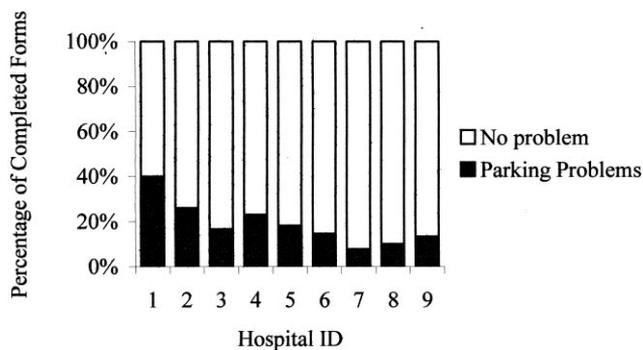


Fig. 2. Problems experienced with parking in each unit.

of spaces near the drop-off/collection points although several commented they were opposed to paying parking charges.

In most cases a partner or parent was the carer (partner 56%, parent 31%, other relative 11%), only rarely was a friend called upon (2%). The range of specialities covered in this audit is illustrated in Fig. 3.

Twenty-one carers (10.5%) did not receive written instructions; of the 179 (89.5%) who did, 2.5% of these found they were not helpful. Seventeen carers (8.6%) commented on inadequate directions related to medications. This was often related to not being informed about potential side effects.

Eighteen (9%) carers stated they did not receive a contact number for use in emergencies. Almost 60% of patients did not receive a follow-up telephone call from the DSU (Fig. 4). When a call was made it was well received, only seven carers commented that it was not particularly helpful. Comments included that they were quite happy, but it was reassuring to receive a telephone call. Some carers, who did not receive a telephone call, stated they would prefer to have been contacted.

In 85% of cases the duration of care was less than or the same as expected by the carer. Thus, 15% of carers felt the amount of care was more than they had antici-

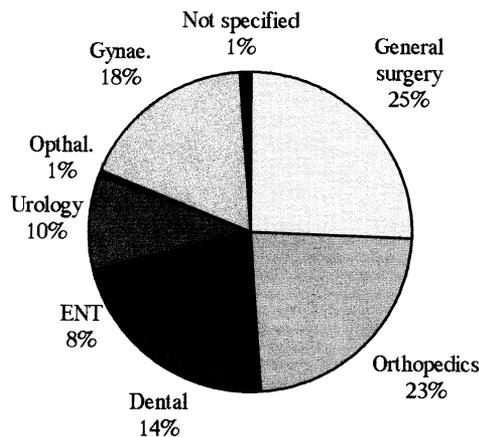


Fig. 3. Breakdown of group by surgical speciality.

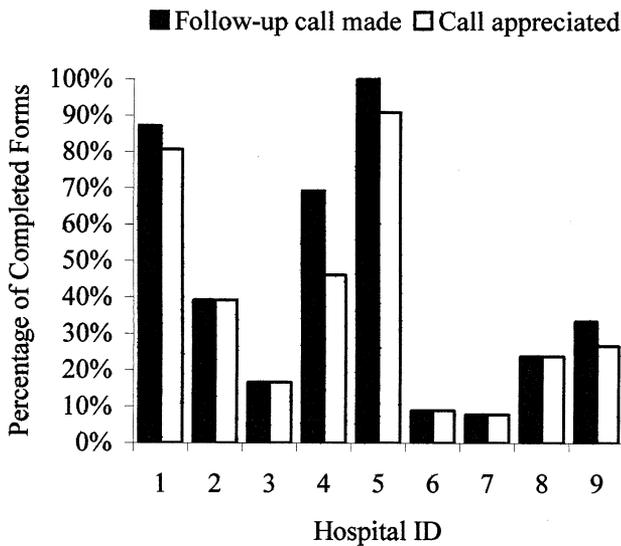


Fig. 4. Follow-up telephone calls from the day case units.

patented or been warned to expect. Closer examination of individual specialities revealed there were particular problems in urology, general and oral surgery. In urology no particular procedure was identifiable as associated with unexpected levels of care required by the carer. The three most frequently performed general surgery procedures were breast lump biopsy, inguinal hernia repair and varicose vein surgery (Fig. 5). The mean duration of care required for breast lump biopsy was 2 days ($SD = 1.5$ days) and no carer was required for longer than they had expected ($n = 10$). Varicose vein surgery required a similar duration of care (2 days, $SD = 2.4$ days), but 25% of carers felt more care was required than they had expected ($n = 14$). Hernia repair required more care than expected in 11% of cases, mean duration of care 2 days ($SD = 1$, $n = 10$).

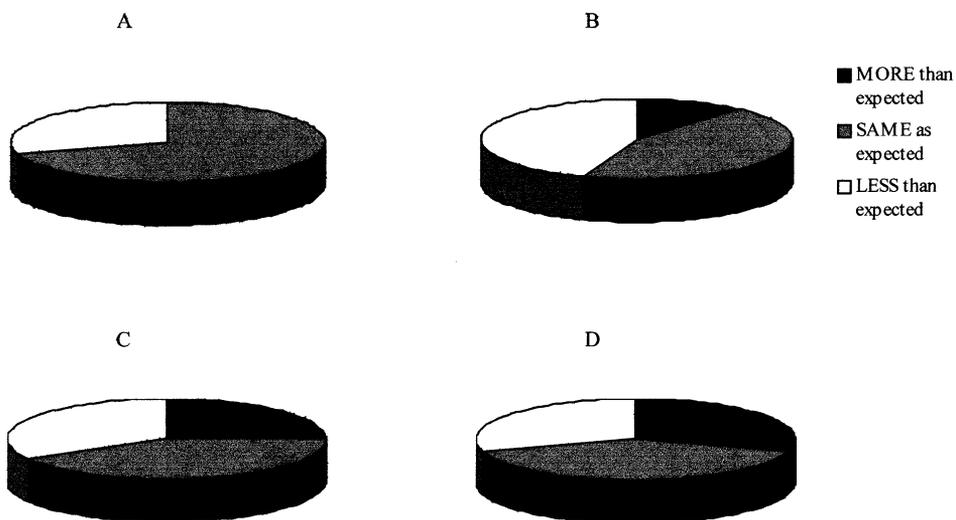


Fig. 5. The amount of care actually required for specific procedures, compared with what the carers had expected to give: (A) breast lump biopsy; (B) inguinal herniorrhaphy; (C) varicose vein surgery; and (D) dental extractions.

Following oral surgery, 30% of carers stated more care was required than they had anticipated ($n = 27$), despite a shorter mean duration of care (1 day, $SD = 1$).

7. Discussion

Fortunately many patients prefer the convenience of day surgery to inpatient care, as it reduces time spent away from home. The success of day surgery relies on a willingness of carers to take on a role traditionally performed by fully trained healthcare professionals. They appear to fulfil this role effectively and evidence suggests there is little increase in workload of primary care teams as a result of increases seen in day surgery [6].

A competent carer is essential should unforeseen complications occur shortly after surgery, but also as there are cognitive failings following general anaesthesia for at least 24 h [7]. Malster et al. [8] called for more attention on carers in subsequent studies. They made the important observation that a significant proportion of carers took unpaid leave from work (36% of those employed). They considered this a hidden cost of day surgery. Unfortunately the response rate from carers in their study was very low.

Our response rate (44%) compares with Buttery et al (41%) [1], is better than Malster et al. (18%) [8], but less well with Woodhouse et al. (64%) and Linden and Engberg (87%) [6,9]. Only that of Malsters' group concerned carers directly. It is not possible to confirm each of the nine units distributed all 50 forms; however, it must be assumed they did so.

Unfortunately there is no guarantee that the person escorting the patient to and from the day surgery unit

will be the carer of the patient, so it is imperative to provide clear concise written instructions which can be given to the final carer.

Journey times have been found to be excessive for some units, and those with perceived problems have been contacted with these findings for closer assessment. The average journey time of 26 min is slightly longer than Malster et al. found (23 min) [8]. Most journey times therefore conform to the Royal College of Surgeons suggestion that 30 min should be the maximum time before the recovering patient is settled in his or her bed at home [10]. The two units with markedly raised times (units 2 and 6), are in busy cities which have more traffic than the authors own unit (unit 1). Several journeys over 1 h were made, which must be considered too long.

A common cause for complaint in most units (19.5%) was difficulty related to parking, despite provision of dedicated spaces. Adverse comments were also made concerning opposition to paying car parking charges, several pointing out they are providing a service for the NHS. In the authors' own unit difficulty arises due to hospital staff and non-day surgery visitors occupying dedicated day surgery drop-off/collection spaces. Strict reinforcement is required to guarantee these spaces are available, such as wheel clamping. These grievances the carers have expressed should not be dismissed lightly, indeed the author's local general practitioners will refer patients to a particular hospital if patients and carers can park there with ease.

Several carers denied receiving written instructions or emergency contact telephone numbers. The units involved are insistent such information is provided for all patients. If the carer is not the escort one cannot guarantee such information is passed on. Little can be done here except identify when this is likely to occur and highlight the importance of the information given to the ultimate carer. They may not consider the arrangement of ringing their general practitioner as providing them with an emergency number to call. In addition the carer could be encouraged to attend the day surgery units' pre-assessment clinics. The reality of this is that there are staff shortages, and it is still difficult in the authors' unit to ensure all the patients are seen preoperatively, let alone ensure all the carers are contacted. The shortfall in communicating information is not uncommon, Woodhouse et al. found only 85% of their patients surveyed postoperatively knew of the existence of a telephone help-line [6]. They do not explain steps taken to ensure the patient knew about it. Preoperative contact with carers is an area requiring attention in the future.

Only three of the nine DSUs have policies in place to contact patients by telephone after their surgery. This rate reflects the national rate of about 30% [5]. The provision of a telephone call had no correlation with

how long the carer was required for. In the authors' own unit, despite having this policy in place 15% did not receive a call. This actually compares well with the experience of Jackson et al. [4], where 33% could not be contacted by telephone on the day following surgery, and Hawkshaw and co-workers and others [2,4,8] (20%) [2]. Over half of the failed contacts did not answer the telephone. It is a matter for discussion whether the patient with no access to a telephone should be precluded from day surgery. Access to a telephone has been sited as a criterion for surgery [3]. In the authors' unit procedures taking place on a Friday, would not be followed-up until the Monday. These patients may well have recovered and even be back at work by that time. Whenever the patients were telephoned the calls were almost always appreciated. Indeed some respondents who did not receive such calls have expressed in their replies to the questionnaire that they would have appreciated a call and would have found it very reassuring. It has been suggested that placing a telephone call may contribute to minimising the impact of day surgery on the primary care team [4]. It would appear to us that it's maximum value is as an audit tool. It would be interesting to assess the impact on primary care contacts across the Wessex region as there is clearly enormous variation between the units' policies regarding telephone follow-up.

It was seen that 85% of carers estimated the duration they would be required to care for was less than or the same as they had anticipated. The notable exception was in the case of dental surgery where the problem was widespread. There are several possible explanations. These patients are usually young adults and it may be that they are more likely to want to be ambulant and return to a more hectic pace of life, earlier, than older patients, and the nature of surgery does not allow this to be the case. The extraction of wisdom teeth can produce significant discomfort for several days after their removal and emphasis on taking regular medication should be made. Based on childhood experience of exodontia, there may be a preconception from the carer, (and the patient), that third molar extraction would be quick, with a minimal amount of trauma.

Problems noted by previous authors include inadequate explanation of the procedure [8], and a very high incidence of muscle pains (40%) and sore throat (46%) following dental extraction in the DSU [4]. This was significantly higher than for any other procedure analysed and was attributed to the use of suxamethonium. This experience could have played a role in our results. The problem we discovered for these carers (and patients), needs addressing and auditing in depth to try to identify the source of the problem, and thus to improve postoperative management.

The provision of preoperative information is further justified, as there is a positive correlation between post-

operative pain and preoperative anxiety [11]. Patients provided with information preoperatively about pain, were found to have a greater tolerance for pain [12]. Patients' preoperative anxiety can be reduced with education or a preoperative telephone call.

Varicose vein surgery is well accepted and promoted as an ideal DSU procedure [13]. The results presented here suggest significant improvements could be made in the postoperative management of this condition.

8. Summary

To enhance and extend the service of day surgery attention must be made to the practicalities of the service including allowing carers to park their cars.

We must ensure good communication with the carer, who may not be the escort. The carer must be encouraged to accompany the patient to pre-assessment if they are not attending on the day of surgery. Improved information sheets may well serve the patient's carer better if we include the answers to commonly asked questions on the forms.

Further research is required to optimise the perioperative management for patients undergoing varicose vein surgery and dental surgery. Greater care must be taken to explain the implications of these procedures to both the patient and their carer.

Acknowledgements

The authors wish to thank the staff of the participating units for distributing and collecting the audit forms.

Appendix A. Audit for carers of day surgery patients

We are constantly trying to improve our service to patients undergoing surgery as a Day Case and for the people caring for these patients. Please delete YES or NO as appropriate.

1. In which hospital did the operation take place?
2. How long did your journey take from the hospital to the patient's home (h/min)?
3. What was the operation?
4. Are you the patient's PARENT/PARTNER/RELATIVE/

- | | | |
|-----|--------------------------------------------------------------------------------------------------|--------------------|
| | FRIEND (please circle)? | |
| 5. | Did you find parking a problem at the hospital? (If YES please specify problem) | YES/NO |
| 6. | Were you happy about instructions for medications? | YES/NO |
| 7. | If you were unhappy, why? Please comment. | |
| 8. | Did you receive <i>written</i> instructions about caring for your relative/friend? | YES/NO |
| 9. | Were these instructions satisfactory/clear? | YES/NO |
| 10. | If not, Why? | |
| 11. | Were you given a contact telephone number in case of emergency? | YES/NO |
| 12. | Did you have a follow-up telephone call from the Day Case Unit? | YES/NO |
| 13. | Was this helpful? Please comment. | YES/NO |
| 14. | How long did it take for the patient to recover enough to manage on their own without your care? | |
| 15. | Was the amount of help that the patient needed as you expected (please circle)? | |
| | MORE THAN EXPECTED | LESS THAN EXPECTED |
| | SAME AS EXPECTED | |

ANY OTHER COMMENTS, PLEASE WRITE ON THE BACK OF THIS FORM
 Thank you for your help. Please post this back to the day case unit at your hospital.

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