

A Direct Booking Hernia Service – A shorter wait and a satisfied patient

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Received 30 July 2005; accepted 19 September 2005

Available online 16 November 2005

Abstract

Introduction: Patients requiring routine operations often have lengthy waits for outpatient appointments and surgery. Our aim was to reduce this wait by offering patients a Direct Booking Hernia Service and to assess its efficacy and its acceptability to patients.

Methods: Two groups of patients referred for treatment of an inguinal hernia were compared. Group 1 were those referred to a single named consultant and all those referred without specifying a consultant's name during the same period. Group 2 were those referred to any other named consultant at the same hospital during the same period. For those in Group 1, the referral letter was triaged by a single surgeon and sent directly to the Day Surgery Unit (DSU). The patient's first appointment was for nurse led pre-assessment in the DSU. At the same visit the duty DSU surgeon checked the hernia to confirm the diagnosis. If medically fit, patients were offered a date for operation within 4 weeks of their pre-assessment. If unfit for DSU, the nurses would discuss the patient with the DSU lead anaesthetist and could book them directly onto an inpatient list or refer them to the outpatient clinic. Group 2 patients followed the traditional pathway of outpatient clinic, then booking for surgery. Group 1 patients were invited to complete a patient satisfaction questionnaire following their treatment.

Results: There were 74 patients in Group 1 and 147 in Group 2 during the study period. In Group 1 3/74 (4.1%) did not have hernias at pre-assessment. The mean total waiting time from referral to surgery was 70 days. In Group 2 the mean wait for an out-patient appointment was 77 days, and the wait from outpatient appointment to surgery was 84 days, giving a total average waiting time of 161 days. The proportion of patients treated as day cases was 88.7% in Group 1 and 70% in Group 2. 43% of Group 1 patients responded to the questionnaire. 94% of these would recommend the service to a friend.

Conclusion: The Direct Booking Hernia Service provides an efficient way of treating patients requiring inguinal hernia repair that is acceptable to patients. It significantly reduces waiting times and reduces the load on outpatient appointments.

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Keywords: Direct Booking; Inguinal hernia repair; Waiting times; Patient satisfaction

1. Introduction

Inguinal hernia repair is one of the commonest general surgical procedures; there are approximately 113,000 new cases of inguinal hernia per annum [1]. Patients requiring such routine operations often have lengthy waits for outpatient appointments and surgery.

The current NHS Plan aims to reduce routine waits to 3 months for outpatient appointments and 6 months for surgery

by 2005 [2]. In addition, national guidelines recommend an increased proportion of hernia repairs be performed as day cases [3]. Such surgery has been shown to be safe, efficient, economical and convenient [4]. Currently, there is a very low overall UK wide day case rate of 20% [5].

It has been suggested that there is relatively little evidence of best practice in place within the NHS; safe and simple pathways are required to manage this large group of patients [6]. Regarding surgical technique, a recent review suggests that the open, tension free mesh repair gives the most consistent good results [7]. However, there appears to be little consistency regarding the management prior to and after surgery.

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This study aimed to set up a Direct Booking Hernia Service and then to compare patients' waiting times for surgery with those receiving the more traditional service. In addition, patient satisfaction with this service was assessed.

2. Methods

Following a pilot study in which six local general practitioner (GP) practices used a faxed referral/booking form (National Booked Admissions Programme) for inguinal hernia repairs, the surgical department decided to assess the effectiveness of a Direct Booking service for patients with inguinal hernias.

The study group (Group 1) included all patients referred to a single named consultant and all patients referred without specifying a named consultant. The process involved the consultant triaging 'Dear Doctor' hernia referrals. All those with a clear diagnosis of primary inguinal hernia were entered into the 'Direct Booking' service, with no age or co-morbidity discrimination. Patients entered a pooled waiting list, rather than waiting for a named consultant. Recurrent hernias, bilateral hernias and uncertain diagnoses were excluded. The patient's first attendance was at the Day Surgery Unit (DSU) for nurse led pre-assessment. At this appointment a protocol driven assessment was made and the duty DSU surgeon confirmed the diagnosis. For those with no hernia the patient was referred back to the outpatient department (OPD) or to the GP as appropriate. Written information about the operation and DSU was given to each patient and surgery followed within 4 weeks. Patients who were deemed unfit for DSU were booked for in-patient management after discussion with the consultant anaesthetist DSU lead, or referred back to OPD if unfit for anaesthesia.

Repair of the hernia was by the open, tension-free, mesh technique in all cases. The surgeon reviewed patients post-operatively in the DSU and they were discharged with written advice, contact details and analgesia. Follow-up was by telephone on day 1 post-operatively. Patients were not routinely seen in the outpatient clinic following their surgery.

A retrospective study was undertaken of all inguinal hernia repairs performed at the Whittington Hospital between October 2001 and January 2003. Patients managed with the Direct Booking service (Group 1: 74 patients) were compared with those referred to other named consultants and subsequently seen in the outpatient clinic (Group 2: 147 patients). All patients booked for inguinal hernia repair via Group 1 or Group 2 were pooled and booked onto the first available list of any general surgeon. For each group, the length of wait from referral to operation was determined. Statistical analysis was performed using a *t*-test (Table 1).

To further assess the Direct Booking service, a postal satisfaction questionnaire was sent to all the patients in Group 1 independently after their treatment (Appendix A). This comprised questions relating to waiting times, their assessment,

Table 1
Summary of data for both groups

	Study group	Control group
Number of patients	74	147
Age range (mean age)	23–89 years (47.2)	22–79 years (50.5)
Mean waiting time for surgery	70 days	161 days
Proportion treated as day cases	89%	70%

the operation and the post-operative period, and their satisfaction with the Direct Booking service.

3. Results

A total of 221 patients were included in this study. Seventy four of these (Group 1) were offered the Direct Booking service and 147 (Group 2) were managed traditionally via the outpatient clinic. There was no significant difference in the ages of Group 1 (47 years) versus Group 2 (50 years) patients.

The mean waiting time from referral to surgery in Group 1 was 70 days (range 10–177). This was significantly shorter than the total wait for the control group. In Group 2 the mean wait for an outpatient appointment was 77 days (range 35–136) and the mean wait for surgery was 84.2 days following the outpatient visit (range 28–105), totalling 161.2 days ($p < 0.05$).

A significantly greater number of hernia repairs were performed as day cases in the study group (89%) than in the control group (70.0%).

Of the study group, 3/74 (4.1%) did not have hernias at pre-assessment. 10/74 (13.5%) patients did not attend pre-assessment and 5/71 (7.0%) patients did not attend (DNA) surgery. This compares with a previous overall DNA rate of 10%. 8/71 (11.3%) patients were found to be unsuitable for day case surgery. No patients were cancelled on the day of surgery.

Thirty-two (43%) patients responded to the satisfaction questionnaire. 84% felt that the waiting time for surgery was 'about right'. 81% found it useful to meet a nurse before the operation and 91% felt they had had all their questions answered before the operation. 6% (two patients) who had further questions returned for an outpatient visit to obtain further information. 94% would recommend the service to a friend.

4. Discussion

Patients had a shorter wait for surgery when booked directly. This would be expected in view of the fact that the wait for an outpatient appointment had been removed. In doing this, the load on outpatient clinics is reduced, and as a result there is greater availability, and indeed a shorter wait, for patients requiring assessment. This would help in achieving the goals set out in the NHS Plan [2].

The Direct Booking Hernia Service has been successful in reducing waits for surgery. Comparisons can be drawn to a similar service offered by many hospitals with respect to ‘lumps and bumps’ where patients attend minor operations lists directly.

The patient survey gave promising results although the response rate was only moderate. This may be because the patients were not pursued a second time if they failed to respond on the first occasion, or may be related to the relatively mobile nature of our local population. No complaints or criticisms of the Direct Booking Hernia Service have been received by the Patient Advocacy and Liaison Service. Most importantly, the patients who responded felt that they were adequately informed prior to surgery. This would be one of the greatest potential concerns in removing the outpatient visit prior to surgery, but it has not been demonstrated to be a significant issue in this survey, perhaps because we give specific written patient information leaflets regarding the procedure, the anaesthetic options, DSU and post-operative analgesia. In addition the patients still see a surgeon at the time of pre-assessment, so that the pros and cons of proceeding with surgery can be discussed.

The day case operating rate with our direct booking group (89%) was higher than the traditional group (70%). This satisfies national guidelines, but still falls short of the results reported by other centres; a public hospital in Denmark reported a day case rate as high as 98% [8]. Effort is required to aim for such a rate; this would both suit patients and indeed hospitals, where shortage of inpatient beds is a common occurrence [9]. The high day case rate in the present study is probably because day surgery was the “default option” in the patient pathway.

Some centres have described a ‘one stop’ approach to inguinal hernia management in which patients are assessed and treated at a single hospital appointment [10]. This effectively eliminates the pre-operative assessment visit. It is reliant upon examination and investigations arranged by the general practitioner, and in some cases, telephone consultations. Whilst satisfactory results were reported, 4 out of 98 patients (4%) were cancelled on the day of surgery, on medical grounds (no, hernia, bilateral hernia and medically unfit). The Direct Booking service had no cancellations on the day of surgery. In view of waiting list pressures and limited operating time, all measures should be taken to avoid cancellations on the day of surgery. Therefore, it is felt that the pre-operative assessment is of value, both to address any of the patient’s enquiries and to ensure that the patient is suitable.

Since this study has been completed all surgeons at the hospital have converted to using the Direct Booking Hernia Service for all patients referred with a definite diagnosis of inguinal hernia.

5. Conclusion

The Direct Booking Hernia Service provides an efficient and safe way of managing patients referred for inguinal hernia repair. It significantly reduces waiting times, offering a date for surgery in an average of 70 days of referral, and also reduces the burden on the outpatients department. It has the added benefit of increasing the proportion of patients who have their operations as day case procedures.

Appendix A. Direct access hernia service questionnaire

Please complete this questionnaire by placing a cross in the boxes provided.

1. Waiting Time

The waiting time for the operation was:

- Too short
 About right
 Too long

Would you rather see a surgeon in clinic before deciding whether or not you wanted an operation?

- Yes
 No

2. Assessment

Meeting a nurse before the operation was:

- Very helpful
 Neither helpful nor unhelpful
 No help at all

The wait to see the surgeon in the assessment clinic was:

- Too long
 About right
 Too short

Did you feel that you had all your questions answered before the operation?

- Yes
 No

3. The operation

The pain after the operation was:

- Less than I expected
 About what I expected
 More than I expected

Did you have to come back to clinic because of any problems after the operation?

- Yes
 No

If so, what problem did you have?

Did you have to visit your GP because of any problems after the operation?

- Yes
 No

If so, what problem did you have?

4. Day Case Surgery

Coping at home after the operation was:

- Easier than I expected
 About what I expected
 Harder than I expected

Would you have preferred to stay overnight in hospital?

- Yes
 Don't mind
 No

5. Follow up

Did you get a call from the day surgery unit the day after your operation?

- Yes
 No

If so, was this

- Helpful
 Neither helpful nor unhelpful
 Not helpful

Would you have preferred to come back to see the surgeon in clinic after your operation?

- Yes
 Don't Mind
 No

6. Improvements

The amount of information given about the operation was:

- Too much
 About right
 Too little

Would you recommend our Day Surgery Unit to a friend with a hernia?

- Yes
 No

Is there anything we could do to improve our service for patients needing hernia operations?
 (Please write below).

Thank you for taking the time to complete this questionnaire. Please return it in the envelope provided.

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