

REPORT TO..... HOSPITAL

Evaluation of discharge planning quality

(Date)

Examination of responses to the PREPARED instrument (patient version only)



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Disclaimer regarding data reported in this paper

The data reported in this paper were transcribed directly from the PREPARED questionnaires supplied to the International Centre for Allied Health Evidence byHospital. Strict validation procedures were applied to check data entry. Any anomalies in the nature of the responses therefore are directly attributable to what was written.

HOW TO USE THE INFORMATION IN THIS REPORT

This report provides summary information from recently discharged patients regarding their perception of the quality of their preparation for, and outcome of, discharge. Process and outcome of quality discharge questions are reported. Text comments from patients are reported as anecdotal evidence of performance. For benchmarking purposes, this data is compared with the last dataset of PREPARED scores collected from this hospital. Quality scores are reported as percentages of the total possible score for each domain or question. Mean +/- the standard deviation is reported as a measure of the variability about the mean for each set of scores.

Quality improvement activities should be developed to improve the scores, and to decrease the variability in scoring. The text comments should be seen in context. Each comment reflects a sample of N=1, and therefore patient's perceptions of quality need to be seen in context. However, text comments provide rich information on the aspects of discharge planning that patients valued, or otherwise.

After quality improvement activities have been undertaken, retesting is required to ensure that the desired improvements have occurred.

In earlier work (Grimmer et al 1999, Hedges et al 1999a,b) we proposed that performance in discharge planning needed to be monitored from the perspective of community consumers. We proposed a number of performance indicators, one in particular which could be addressed by data from the PREPARED instrument:

Incentives should be developed for hospital staff to ensure positive and ongoing commitment to appropriate discharge planning activities.

ELEMENTS

1. Minimisation of delay in discharge
 2. Achieving time and day of discharge
 3. Achieving requisite levels of stakeholder satisfaction (patients & carers, General Practitioner, Nursing Home)
 4. Evidence that quality improvement strategies are implemented to deal with identified problems
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The data we provide in this report fulfils the first three of these elements and allows the fourth to be evaluated by repeated testing using the PREPARED instrument. The number of respondents may not be sufficient for differences in discharge process and outcome to be fully explored. We are happy to discuss the implications of these findings with relevant staff from Hospital.



STUDY AND SAMPLE CHARACTERISTICS

The method

100 PREPARED questionnaires were dispatched during March/ April by the hospital staff to recently discharged patients from Hospital. *NB only the patient version of the PREPARED instrument was employed for this quality improvement exercise.* Non-respondents within a certain time period were telephoned by hospital staff to facilitate return of the questionnaire. Where it appeared that patients were having physical difficulties in completing the questionnaire, the telephone interviewer was instructed to take over-the-phone responses, with the patient's permission.

The respondents

There were respondents (an 80% return rate). The gender proportions amongst respondents were% females and% males. The mean age of female respondents was years (SD \pm years), ranging from 50 to 99 years of age. The mean age of male respondents was years (SD \pm years), ranging from 66 to 95 years of age. Given the age distribution of male and female respondents, an 80% response rate is very high compared with similar surveys of aged people (Grimmer et al 1999, Clare and Hofmeyer 1998). % of respondents were admitted to for elective procedures and the remainder (.....%) were admitted as emergencies.

Ward location

The ward location of respondents is shown in Table 1.

Table 1. Ward location

| Ward name | Percentage of respondents |
|--------------|---------------------------|
| Ward A | 1.3 |
| Ward B | 47.5 |
| Ward C | 1.3 |
| Ward D | 1.3 |
| Ward E | 1.3 |
| Ward F | 10.0 |
| Ward G | 2.5 |
| Ward H | 1.3 |
| Ward I | 1.3 |
| Ward J | 1.3 |
| Ward K | 2.5 |
| Ward L | 18.8 |
| Ward M | 10.0 |
| TOTAL | 100.0 |

Note: In this and other tables, percentages may not sum exactly to 100 due to rounding.



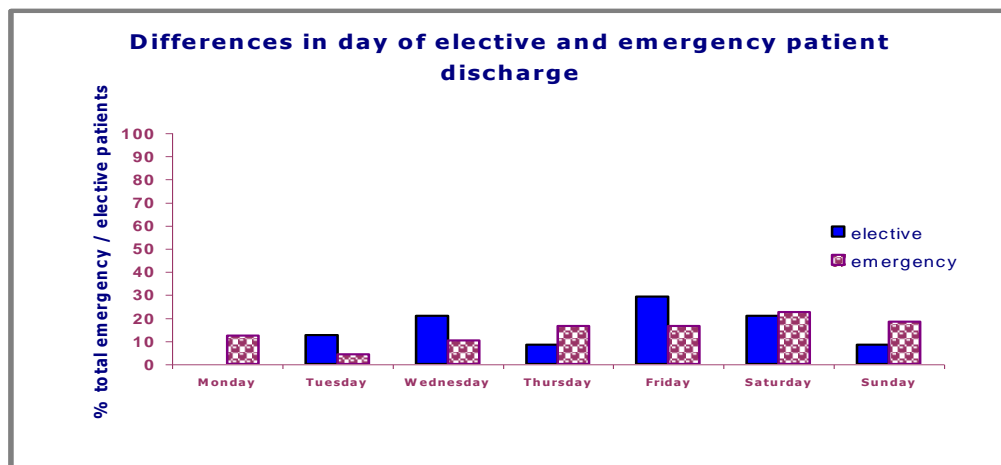
Time since discharge of survey administration

The average time from discharge until the date of responding to the questionnaire was days (SD ±....) (ranging from days to ... days). (The date of discharge was obtained by patient recall on the questionnaire and therefore may not be completely accurate.) This suggested that as required by our current version of PREPARED, most patients responded to the survey within a week of discharge from Hospital. We propose that this time frame is appropriate for capturing data from patients at the most vulnerable time post discharge, and the time when patients are most likely to be critical of their discharge planning.

CHARACTERISTICS OF DISCHARGE

Day of discharge

We report the day of discharge for elective and emergency patients as a measure of the first element of our proposed indicator of discharge planning quality. The day of discharge may well be dictated by the patient, in relation to family availability, however for patients discharged to home on their own, Saturday or Sunday discharge may be inappropriate. Of the patients who reported being an elective admission, we have day of discharge information from (this is the denominator for the elective patient data in the graph below). We had day-of-discharge information for all of the patients who reported being an emergency admission.



Time of discharge

We report the time of discharge as the second part of the first element of our performance indicator. We recommend that no patient is discharged after 3pm, to ensure that patients return home in daylight and in working hours, in case they need assistance from health professionals or community services that same day. Hospital generally performed well in this element, with onlyper cent of patients discharged after 5pm. The time of discharge was mostly in the



morning or early afternoon. The frequency of times (patient recalled) of discharge are listed in Table 2A using a 24 hour clock, and the most common times of discharge are summarised in Table 2B. On the basis of this feedback, Hospital may wish to refine its interpretation of this indicator, preferring all patients to be discharged prior to lunch time, or an earlier time in the afternoon.

Table 2A. Time of discharge

| Time of discharge | % |
|--------------------------|--------------|
| 0730 | 1.3 |
| 0930 | 1.3 |
| 1000 | 15.0 |
| 1030 | 8.8 |
| 1100 | 17.5 |
| 1130 | 1.3 |
| 1200 | 2.5 |
| 1300 | 7.5 |
| 1315 | 1.3 |
| 1330 | 2.5 |
| 1400 | 15.0 |
| 1430 | 3.8 |
| 1500 | 3.8 |
| 1530 | 2.5 |
| 1600 | 1.3 |
| 1630 | 2.5 |
| 1700 | 3.8 |
| 1730 | 1.3 |
| 1800 | 2.5 |
| 1830 | 1.3 |
| Not stated | 3.8 |
| TOTAL | 100.0 |

Table 2B. Summary of common times of discharge

| Time of discharge | % |
|--------------------------|--------------|
| Before 0900 | 1.3 |
| 0900-1299 | 46.3 |
| 1300-1700 | 43.8 |
| After 1700 | 5.0 |
| Not stated | 3.8 |
| TOTAL | 100.0 |



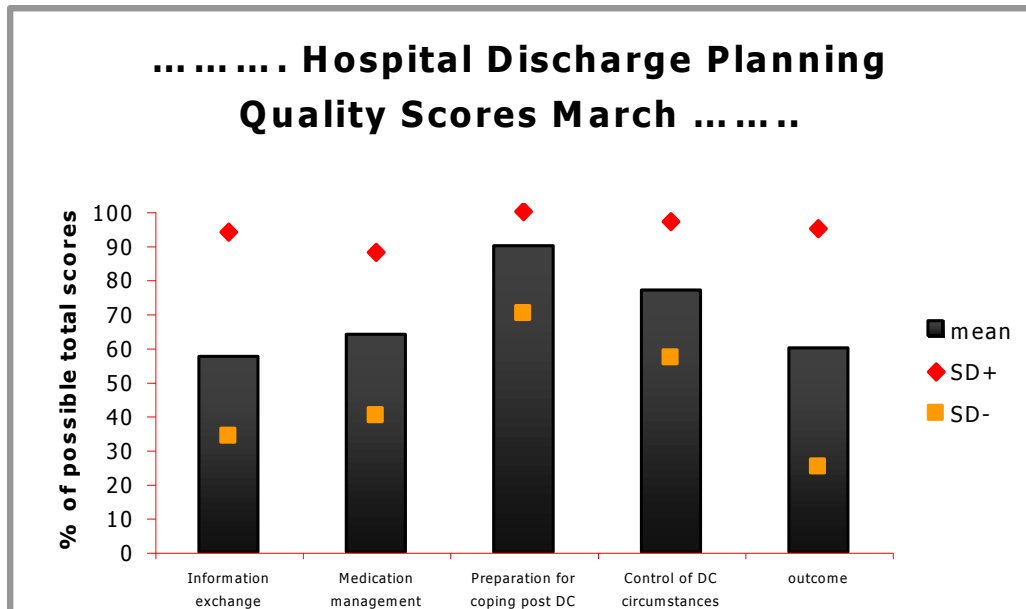
QUALITY OF DISCHARGE PLANNING

The process domains and outcome questions deal with consumer perceptions of aspects of the quality of planning for discharge. The PREPARED instrument domains and outcome questions offer a comprehensive way of reporting consumer perspective of discharge planning back to ward staff to inform quality improvement activities.

Ideally, all domains and the outcome questions should have a mean score of close to 100%, with little variability about the mean (indicating that all patients reported similar scores). This was not the case for any domain or outcome question from this sample. Moreover, not all patients answered questions related to domains 1 and 2, responding not applicable to at least one of the component questions. We suggest that a benchmark for discharging elderly patients (many of whom have been admitted as emergencies) should be to address all the component issues in domains 1 and 2 (listed in this document) whilst patients are in hospital, in case the admission (or any subsequent readmission) is because of unidentified community service, equipment or medication needs.

Summary of discharge planning quality for Hospital

The mean scores of each of the four process domains and the satisfaction with discharge outcome question are expressed as a percentage of the total possible scores in the graph below. Error bars (mean +/- SD) are reported around the mean as an example of the variability of responses.



These scores suggest that improvements could be made in all areas, particularly in information exchange on community services and equipment, medication

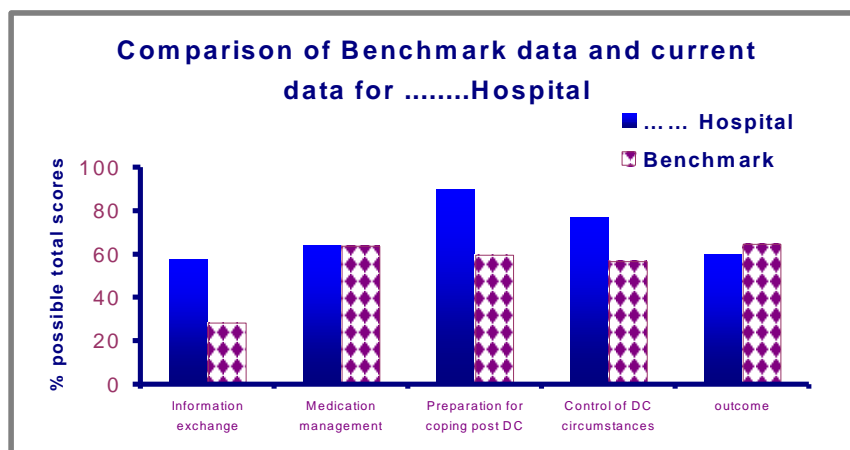


management issues (including information on side effects, and written and verbal information on use of medications). These changes to process may well produce improvements in the satisfaction with outcome score.

Benchmark PREPARED quality scores (against previous data collected from Hospital)

We benchmarked this data against previous data collected from Hospital using PREPARED, in March 1998, from similarly aged patients in similar proportions of emergency and elective admissions to medical and surgical wards.

For ease of interpretation, we report the mean scores together in the graph below. This comparison indicates that Hospital has performed considerably better in this quality improvement exercise than in its previous one in 1998, using PREPARED. Domains which improved included information exchange on community services and equipment, preparing patients to cope on discharge, and providing patients with control over their discharge circumstances.



Attendance at/ use of, community health services post discharge

The use of services provided by community agencies and/or medical practitioners is summarised in the following table.

| Service provider | Number of patients |
|------------------------|--------------------|
| GP | 30 |
| Physiotherapist | 5 |
| Occupational therapist | 3 |
| Domiciliary care staff | 10 |
| Home nursing service | 14 |
| Outpatient Dept. | 3 |
| Medical specialist | 17 |
| Chemist | 23 |
| Meals on Wheels | 11 |

Total number of community services used was 116 in this sample, with general practitioners and chemists being the most common. The proportion of usage is similar to the Grimmer et al (1999) data set, and also to the benchmark data from Hospital in 1998.

TEXT COMMENTS

Explanation: The PREPARED instrument allows half a page of space for written free-text comments on any aspect of care in hospital or after discharge. The respondents made extensive use of this opportunity. The full range of their comments is listed in the following section.

Overall comments on visit to / discharge from hospital (Examples only)

- ⊖ Very pleased with all management and staff, meals lovely and nicely presented. Very comfortable.
- ⊖ I sadly am a frequent visitor to, but am very disillusioned with your nursing. Some are outstanding, some are very poor, there seems to be no "middle" rating.

Information that patients would have liked on discharge (examples only)

- ⊖ What medications were given and why.
- ⊖ I would have liked a bit more information about what problems I had inside my body, instead of reading about them when I got home.



Problems since discharge (examples only)

- ⇒ Plaster too tight. Had to return to Dr to have it loosened.

Who has helped at home since discharge (examples only)

- ⇒ Son and his wife who live next door.

Has anything been done to deal with your worries? (examples only)

- ⇒ Just lonely, haven't got anyone to talk to.
- ⇒ I have a wonderful GP who is most attentive - I have no family.

Reasons for increased financial costs (examples only)

- ⇒ **Purchases / services**
Had to purchase a cordless phone for safety purposes.
Doctor
Chair, walking stick
Emergency services cost
- ⇒ **Electricity costs**
Nebuliser machine x 2
Oxygen concentration pump



APPENDIX 1

Interpretation of the quality domains

The process domains reported in the PREPARED ward score deal with aspects of what was done for the patient to prepare them for discharge.

Process domain 1 seeks information from five questions that deal with preparation and organisation of discharge arrangements.

Q1. How much information did **you** receive in how you would manage your usual activities when you went home? (*e.g. shopping, showering, bathing, dressing, toileting, feeding, mobility, transportation*)

Q2. How much information did **you** receive on community health services you might use once you went home? (*e.g. Domiciliary Care, District Nurse, Meals on Wheels*)

Q3. How much information did **you** receive on equipment you might need once you went home? (*e.g. rails, shower chair, walking aids*)

Q4. Did anyone arrange community services for you?
(*e.g. Domiciliary Care, District Nurse, Meals on Wheels*)

Q5. Did anyone arrange equipment for you?

Process domain 2 seeks information on medication management.

Q1. How much information did **you** receive about the medications that you were to take home?

Q2. How much information did **you** receive about the side effects of the medications that you were to take at home?

Q3. Were **you** given written instructions about your medications?

Process domain 3 seeks information on preparation for coping post-discharge

Q1 Was there any other information **you** would have liked whilst you were in hospital to prepare you for coping at home?

Q2. Has anything been worrying **you**, about managing at home?



Process domain 4 deals with control of discharge circumstances.

- Q1 How confident did **you** feel about managing at home?
Q2. Were there any delays?
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Interpretation of the outcome questions

The outcome questions reported in the PREPARED ward score deal separately with various aspects of discharge planning outcome, including:

- Q1. Overall, how prepared did you feel for returning home?
(overall perception of the quality of discharge planning)
- Q2. If you have already received community services, have they met your needs? *(Perception of the quality of in-hospital organisation of community services)*
- Q3. If equipment has already been provided, has it met your needs? *(Perception of the quality of in-house organisation of equipment for use at home)*
- Q4. Health service usage (and associated health costs) incurred post discharge *(to estimate potential cost shifting)*
- Q5. Additional expenditure post discharge *(to estimate personal health cost burdens borne by patients).*

RESPONSES IN PROCESS DOMAINS OF QUALITY DISCHARGE PLANNING

Domain 1: Information exchange (community services and equipment)

This domain deals with the patient's recall of advice about managing on return to the community, and the arranging of community services and equipment. The maximum possible score for this domain is 8. The mean score for this domain in this sample of patients was 4.6 (SD \pm 2.9) (minimum score = 0, maximum score 8).

Approximately one-third of respondents answered 'not applicable' to one or more aspects of this question, and the mean cumulative scores are derived from those patients who responded either 'no information, some information, or 'sufficient information'. Patients answering 'not applicable' presumably did so because they did not perceive that they had need of information on community services or equipment. Of those patients who responded to the questions in this domain, there were no significant differences between responses by men and women, and no difference in response between wards. There was no difference in response from patients who had had an elective or an emergency admission.



Domain 2: Medication management

This domain deals with information about and organisation of medications. The maximum possible score for this domain is 5. The mean score for this domain in this sample of patients was 3.2 (SD \pm 1.2) (minimum score = 0, maximum score 5).

There were no significant differences between domain responses by men and women, and no difference in response between wards. Comparisons were made between wards which had five or more respondents. Those wards with smaller numbers were deleted from the per-ward comparisons. Approximately one-third of respondents answered 'not applicable' to this question, and the mean scores are derived from those patients who responded either 'no information, some information, or 'sufficient information'. Patient answering 'not applicable' presumably did so because they did not perceive that they had need of information on medication. As for the previous domain, a quality improvement question that could well ask is whether all patients in this age range need to have medication issues addressed whilst they are in hospital, in case of unidentified needs and the potential for medication misadventures. There was no difference in response from patients who had had an elective or an emergency admission.

Domain 3: Preparation for coping after discharge

This domain deals with dealing with concerns of patients regarding returning to the community. The maximum possible score for this domain is 2. The mean score for this domain in this sample of patients was 1.8 (SD \pm 0.4) (minimum score = 0, maximum score 2). There were no significant differences between domain responses by men and women, or between responses pertaining to wards. Patients did not have the opportunity to respond 'not applicable' to the items in this domain and 92% patients responded. There was no difference in response from patients who had had an elective or an emergency admission.

Domain 4: Control of discharge circumstances

This domain deals with delays in discharge and patients' confidence on the day of discharge regarding return to the community. The maximum possible score for this domain is 3. The mean score for this domain in this sample of patients was 2.3 (SD \pm 0.6) (minimum score = 0, maximum score 3). There were no significant differences between domain responses by men and women, or between responses pertaining to wards. Patients did not have the opportunity to respond 'not applicable' to the items in this domain. 92% patients provided a response. There was no difference in response from patients who had had an elective or an emergency admission.



DISCHARGE OUTCOME SCORES

The three outcome variables reflected patient satisfaction with the discharge planning activities that had been undertaken at Hospital, whether community services had fulfilled patient needs and whether equipment had been appropriate. Not all patients responded to all three questions so an outcome score (overall) was inappropriate.

Overall satisfaction with discharge planning

This question provided an overview of patient's overall satisfaction with the outcome of discharge planning. The maximum possible score for this domain is 2. The mean score for this domain in this sample of patients was 1.2 (SD \pm 0.7) (minimum score = 0, maximum score 2). There were no significant differences between domain responses by men and women, or between responses pertaining to wards. All patients responded to this question. Of note was reporting by 16.7% of patients (N=14) of being dissatisfied or very dissatisfied with discharge planning outcomes. There was no difference in response from patients who had had an elective or an emergency admission.

Satisfaction with community service organisation

This question deals with satisfaction and acceptability of organisation of community services post discharge. The maximum possible score for this domain is 1. All 18 patients for whom the community service organisation question applied were satisfied with the outcome.

Satisfaction with equipment organisation

This question deals with satisfaction and acceptability of the organisation of equipment post discharge. The maximum possible score for this domain is 1. All 16 patients for whom the equipment organisation question applied were satisfied with the outcome.

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