

# The development, validity and application of a new instrument to assess the quality of discharge planning activities from the community perspective

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## Abstract

**Objective.** To describe the development, validity and application of a new instrument (PREPARED) for obtaining feedback from community consumers of discharge planning activities.

**Design.** Iterative qualitative and quantitative investigations.

**Setting.** The community catchment area of a metropolitan Australian tertiary public hospital.

**Study participants.** Patients aged over 65 years, with a range of conditions, recently discharged from hospital, their carers, and hospital nursing staff.

**Actions.** PREPARED was constructed from interviews with patients, carers and hospital staff. It was trialed and modified to ensure sensitive measurement of key attributes of discharge planning process and outcome. This paper explores the patient and carer versions of PREPARED. Data items were reduced to domains of key questions by factor analysis. Instrument performance was assessed by correlation of process and outcome measures, by comparing PREPARED responses with subsequent unstructured interview data, and by testing whether PREPARED responses were independent of health-related quality of life at the time of survey.

**Results.** Four key process domains were identified: information exchange (community services and equipment), medication management, preparation for coping after discharge and control of discharge circumstances. Outcome was measured as overall satisfaction with discharge, whether equipment and community service needs had been met, use of health services and health related costs post-discharge. The instrument performed well when compared with interview data, the process and outcome domains were largely independent of each other, as were responses to PREPARED and SF-36.

**Conclusions.** PREPARED offers a comprehensive way of closing the quality improvement loop, by providing information from the community perspective on the quality of planning for discharge from the acute hospital setting.

**Keywords:** community, discharge planning, feedback, quality measures, total quality management, validity

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We describe the development, modification, testing and application of a new survey instrument, PREPARED. The acronym is derived from elements of the phase of healthcare to which it refers: Prescriptions, Ready to re-enter community, Education, Placement, Assurance of safety, Realistic expectations, Empowerment, Directed to appropriate services.

The purpose of the survey is to gather information on

community stakeholder perceptions of the quality of the process and outcome of discharge planning activities undertaken in the acute hospital setting. PREPARED responses are made available, in the form of indices of performance, to hospital staff responsible for discharge planning, to assist them in monitoring and improving the quality of discharge planning activities. PREPARED so far consists of congruent

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A paper copy of the survey instrument is available to readers on request.

questionnaires for patients, carers, general medical practitioners and nursing home administrators. This paper deals with the patient and carer components of the instrument.

The societal objectives of discharge planning have not been given high priority in the literature [1]. Most studies address discharge planning activities from the perspective of the hospital alone. The aims of published discharge planning initiatives seem to be minimization of expensive bed days in acute hospitals and the efficient release from the hospital of a patient who can safely resume community living. These aims seldom address evaluation of patient and carer outcomes, or the impact on community health services [1,2]. Quality discharge planning is reported to support the seamless transition of patients from hospital to the community [3,4]. We suggest that to be fully effective, it should take a community-focused approach to problem solving and goal setting, and address the expectations of community health providers, patients and carers, without prejudice to the imperatives of hospitals and funding bodies.

Successful discharge from acute care settings is believed to be dependent on factors such as the availability of a well carer, appropriate and timely provision of requisite community services, equipment and medications post-discharge, and a supportive and safe home environment [5,6]. There has been, however, little scientific evaluation of the benefits derived by community stakeholders from well-planned discharge activities. A major reason for this appears to be the lack of appropriate evaluation tools, and a paucity of routine evaluation processes that support collection of feedback in a systematic fashion from community stakeholders.

Appraising the economics of discharge planning requires identification and measurement from a societal perspective of the benefits as well as the costs. The most readily acknowledged benefit of planning for discharge appears to be savings associated with the reduction of acute hospital bed days [7]. This is a conservative measure of benefit as it ignores any impact that planning for discharge may have on length or quality of life, or on subsequent rehospitalization. There has been little evaluation of downstream costs incurred by patients and carers after discharge, or by community service providers.

We have described a continuous quality improvement approach to discharge planning activities in the acute care setting [8]. To support this approach, regular review of performance and costs is required, based on feedback from the consumers of discharge planning activities, these being most commonly patients, their carers and community health service providers. Thus we have conceptualized a survey instrument to complete the feedback loop in the Total Quality Management cycle as we have applied it to discharge planning [9]. We believe that regular provision of feedback from community stakeholders to hospital staff using a standard and practical tool would provide impetus and incentive for meaningful improvements in performance, although the evidence for this remains to be demonstrated. This paper deals with instrument development, modification, validation, and application as a feedback mechanism for hospital staff.

## Method and developmental results

### Target users of the instrument

The primary target of PREPARED, to date, has been patients over the age of 65 years, who have recently been discharged from medical or surgical wards of acute care hospitals. We described previously the variable success of discharge from the acute hospital setting for this group [8]. We have also sought information from their carers, who often assume a substantial burden once the patient has returned home [7]. We have developed versions of the instrument, for use where appropriate, by general medical practitioners and by administrators of nursing homes (to which very disabled patients may be discharged). We intend to report on these versions of the instrument in further publications.

To minimize expenses, we designed the instrument to be administered in a written format, and to be received and returned by post. It thus needed to be of minimum length, and to be easily read and understood by older people. So far only an English-language version has been developed, and thus our target group has been literate in spoken and written English. The optimum time-frame of administration was determined within the developmental process.

### Instrument development, revision and testing

We developed the instrument using a process which built progressively on findings from expert opinion, coupled with interviews and draft questionnaires involving hospital staff, patients and their carers. This allowed for simultaneous validation and modification of the instrument, in both content and design [10]. We reduced the number of data items by factor analysis. We tested the validity of the instrument by comparing its responses with interview data, and by correlating the process and outcome domains. We also assessed the divergent validity of PREPARED by comparison with the MOS SF-36 [11].

### Initial investigations with hospital staff

One large tertiary public hospital in metropolitan Adelaide, South Australia participated in the development of the instrument by providing access to staff on medical and surgical wards, as well as to elderly patients. One of our team interviewed each in-charge nurse ( $n = 8$ ) on the hospital's medical and surgical wards, using unstructured interview techniques. The interviews focused on issues of concern in effectively discharging patients in a quality manner. Interviews were tape recorded, transcribed, and then summarized by collating key words and phrases. Sixteen main areas of concern to ward staff were identified, each issue being related to hospital processes.

This list of 16 concerns was circulated to all staff ( $n = 26$ ) on the hospital's medical and surgical wards. Instructions were to rank these concerns for importance in the quality of discharge planning with respect to three patient types: palliative, elective admission and emergency. Twenty-three questionnaires were returned. There were no more than trivial differences in the nature of response with respect to patient

**Table 1** Ward staff ranking of charge-nurse concerns regarding quality aspects of discharge planning

Area of concern	Total responses (%)
1. Communication with doctor	13.3
2. Communication with patient	11.9
3. Communication with family	11.4
4. Communication with ward	10.5
5. Prompt and appropriate assessment in hospital	7.6
6. Adequate time for discharge	7.1
7. Discharge responsibility owned by ward staff	6.7
8. Education of patient	6.2
9. Discharge medications provided within 2 hours	4.8
10. Documentation for other community services	4.8
11. Documentation in hospital	3.8
12. Prompt community service availability	3.8
13. Prompt and appropriate placement in the community	3.8
14. Education of ward staff/doctors	2.9
15. Education of family	1.0
16. Adequate staff numbers	0.5

type, and thus responses were combined to provide an overall picture (see Table 1).

#### Initial investigations of patients and carers

Over a period of 1 week, we identified 26 patients on medical and surgical wards whose discharge was anticipated within the next 24–36 hours, who were aged 65 or over, who were fluent in reading and writing English, and who were returning to their own home or hostel-type accommodation. They reflected a wide diagnostic mix of elective and emergency joint and general surgery, as well as medical admissions for heart, respiratory, gastrointestinal and gynaecological conditions. We were also interested in their carers, whom we defined as the main person assisting the patient with activities of daily living after discharge (such as bathing, dressing, feeding, toileting, shopping, transportation or mobility). Twenty-two patients and 19 carers agreed to participate in this aspect of the study. They were interviewed in person before the patient was discharged from hospital, and then were interviewed separately by telephone 1 and 2 weeks after discharge by the same researcher. At each of these interviews, the interviewer used the same discussion starter questions about quality aspects of discharge planning. Free text responses were recorded at each interview, and patients and carers were encouraged each time to elaborate on anything that concerned them about the hospital stay, and about their return to the community. These responses were transcribed and analysed for main and subthemes.

**Table 2** Typical anxieties and concerns of patients and carers 1 week post-discharge

‘What do I do if I get chest pain again?’
‘I know that in the future I will need more help at home, but I don’t know who to ask.’
‘I still feel tired and weak, how long will this go on?’
‘I still need to rest a lot.’
‘I wanted to be asked if I wanted help at home and to be told who could help me.’
‘I was provided with no advice initially but lots of advice when readmitted as an emergency.’
‘I would like to be allowed to ask staff for help but they are so busy.’
‘I missed out on messages from family – staff didn’t pass them on.’
‘I would like someone to help with wound dressing, it looks awful and I don’t want to touch it.’
‘I was told not to reach up, so I can’t dust and I don’t think home help will come, I am not eligible.’
‘I can’t change light bulbs because I can’t reach up.’

A comparison of the three sets of patient and carer responses (while in hospital, and 1 and 2 weeks post-discharge) found that, while the interview in hospital produced little evidence of anxieties and concerns, these surfaced in discussions with both patients and carers 1 week post-discharge. By 2 weeks post-discharge, the concerns in both groups had changed in nature as health improved and/or patients and carers developed strategies to cope with changed living circumstances. Thus, we considered 1 week post-discharge to be the most sensitive time for capturing information on patient and carer perceptions of the quality of discharge planning activities undertaken whilst in hospital. Typical comments at 1 week post-discharge are reported in Table 2. Our findings appeared to reflect a failure by patients, carers and hospital staff to appreciate, during the inpatient stay, the likelihood of patients experiencing problems in managing after discharge. Patient and carer concerns addressed not only issues of process (what was done in hospital), but also outcome (that is, achievement of realistic lifestyle goals on return to the community), as well as health-related service use and costs incurred post-discharge. It also seemed that staff and patient process concerns reflected different orientations. Staff concerns were time limited (what needs to be done to clear the hospital bed?), whereas patient and carer concerns were more future oriented (how do we cope after leaving hospital?).

Our findings also indicated a short window of opportunity for capture of specific and sensitive information from patients and their carers on perceptions of discharge planning quality (1 week post-discharge). Our findings concurred with work by McCallum [12] who identified a significant decrease in quality of life at 1 week after discharge from hospital, which was not present prior to discharge, nor at 2 weeks after discharge.

Our investigations also highlighted several important features relevant to the construction and delivery of our post-discharge survey instrument:

- (i) while willing to provide feedback on their hospital stay, patients and their carers were most comfortable with only one post-discharge contact;
- (ii) telephone interviews were expensive of staff time and were unlikely to provide more information than a well-constructed written instrument. They were also unlikely to increase compliance with questionnaire completion, as we found difficulties in readily contacting people by telephone once they had been discharged from hospital;
- (iii) perceptions of the quality of discharge planning were unlikely to be related to perceived quality of life. We suspected this because, at interview, a number of patients who saw themselves as fully recovered from their hospital stay commented negatively on the quality of their discharge planning.

#### **Consideration of patient and carer concerns by hospital staff (learning how to close the feedback loop)**

We presented the findings from the patient and carer interviews to the hospital staff, in the context of their own responses regarding quality of discharge planning. In conjunction with the nursing staff, we grouped the patient, carer and nursing staff concerns into broad constructs. This provided us with a methodological framework for establishing health indicators that were important to different groups of stakeholders, and also provided us with important pre-test information upon which to build our survey [13–15]. Of note was the lack of outcome-oriented concerns by hospital staff, and their time-limited concept of process, compared with the mix of forward-looking and reflective process and outcome concerns expressed by patients and their carers. We also came to realise that the opinion of consumers about discharge planning was the essential element in any critique of discharge planning quality.

#### **Initial instrument design**

We drafted the initial version of the PREPARED instrument from these collated findings. A written patient questionnaire, with a separate yet congruent questionnaire for the primary carer, addressed a range of process and outcome issues related to recent discharge from an acute hospital. A timeframe of 1 week post-discharge was used to capture patient and carer perceptions of quality in planning for discharge at the peak time of recall.

This draft instrument was discussed by an expert panel of health professionals, a questionnaire layout designer, discharge planning staff, a health economist, and a qualitative researcher to test further for face and content validity [10,16–18]. This group recommended amendments to question wording for clarity, and to the instructions, order of questions, and instrument layout to encourage completion.

#### **Method of administration**

Patients who have been discharged to an independent living arrangement (home or hostel) within the previous week are identified from hospital records. They are sent the patient version of the PREPARED instrument with an instruction letter signed by the medical or nursing ward chief and a reply paid envelope. The carer version of the instrument is included, with a separate set of instructions, and a separate reply paid letter. We have found that most acute hospital data bases of patient details do not indicate whether patients have a primary carer, and so we allow for the possibility that every patient has one. Patient and carer questionnaires are identified by the hospital record number only (no record is kept of patient name or contact details). In this way, patient and carer responses cannot be identified by name. This confidentiality is an important ‘selling’ point for patients and carers, who may want to express extreme dissatisfaction without fear of recognition by hospital staff. Thus, no consent form is used, as we believe that by choosing to return the completed questionnaire, patients and carers are demonstrably providing consent. On receipt of completed questionnaires from patient and carer, we can link matched responses by patient record number and date of admission/discharge.

#### **Pilot testing the draft instrument**

We piloted the instrument and the method of its administration on the next 50 elderly patients to be discharged from the medical and surgical wards in the acute care hospital, and their carers. These patients had a similar illness and age profile to the sample on which PREPARED had been developed. Feedback was sought on the usefulness of instructions for completion of the PREPARED instrument, and on the design, content, wording and organization of questionnaire items. We made no attempt to analyse the actual responses to the questionnaire. Rather we were concerned with feedback on the method of information capture [13,16]. On this feedback, further changes were made to each questionnaire, including a larger font, better organization of sections, additional response categories to account for patients/carers for whom items did not apply, and additional questions to deal with carer concerns. The resultant PREPARED instrument contained an extensive list of questions for patients and carers which addressed a range of process and outcome issues related to aspects of discharge planning which had been identified throughout instrument development. In total, there were 16 process and seven outcome questions for patients, and 14 process and six outcome questions for carers.

#### **Validation trial**

Over a 3-month period, 834 elderly medical and surgical patients, and their carers, were surveyed immediately following patient discharge from hospital, using the patient and carer versions of the revised PREPARED instrument and the 1 week version of the SF-36 quality of life survey [11]. The patient illness and age profile was similar to that in our earlier investigations to develop PREPARED. The SF-36

**Table 3** Content of the key process domains and factor scores

Process domains	Process question content	Factor score patients	Factor score carers
Information exchange (receipt of advice about community services and equipment, and organization of same)	Advice on managing usual activity	0.23	0.22
	Advice on community services	0.27	0.21
	Organization of community services	0.29	0.22
	Advice on equipment	0.28	0.20
	Organization of equipment	0.27	0.29
Receipt of medication information	Advice on use of medications at home	0.42	0.44
	Advice on side effects	0.41	0.45
	Written instructions on medications	0.35	n.a. <sup>1</sup>
	For carer: information on personal care of patient	n.a.	0.29
Preparation for coping post-discharge	Any other information required whilst in hospital	0.6	0.6
	For patient: Worries about managing at home	0.5	n.a.
	Carer confidence about managing the patient at home	n.a.	0.6
	On the day of discharge, patient confidence about managing at home	0.6	n.a.
Control of discharge circumstances	Delays in leaving hospital	0.6	0.2

<sup>1</sup> Not applicable.

questionnaire was used to test whether patient and carer perceptions of the quality of discharge planning were congruent with their concurrent perceptions of their health-related quality of life. Five hundred patient responses and 431 carer responses were obtained from this sample.

### Dealing with discharge planning process questions

We subjected the patient and carer responses to the process questions to discriminant factor analysis, unrotated correlations and varimax rotations to reduce the number of process variables down to the smallest set of factors which best described key process domains in the data set [19]. We used the 'eigenvalue greater than one' rule to identify the key factors (domains) and varimax rotations to estimate the ranking of key questions within each domain. The factor loadings were similar for patients and carers, identifying the same process domains for both groups (information exchange on community services and equipment, medication management, preparation for coping post-discharge and control of discharge circumstances). The key questions in these four domains described 57% of the total variance for patients and 68% of the total variance for carers. Within each domain, there were similarly sized factor score coefficients for the key questions, suggesting that ranked interval scoring for categorical responses within each question was appropriate for analysis purposes. Via this process we were able to eliminate four of the 16 process questions for patients, and three of the 14 carer process questions. The components of the four process domains are reported in Table 3, as well as the coefficients generated from varimax rotation, which

illustrate the equal weighting of questions within each domain. By summing the responses in each domain, we derived individual process domain scores, and a total process score for the four domains.

### Dealing with discharge planning outcome questions

PREPARED contains three outcome questions each for patient and carer and four questions relating to cost and service usage (Table 4). We considered these items to be sufficiently different in intent to be independent of each other, and hence they were not submitted to factor analysis. Similarly to the process questions, we applied ranked interval scores to the categorical responses to the outcome questions, and summed them to provide a total outcome score. We treated the costs incurred, and service use information, in two ways: by categorical reporting of the types of expenditure and health services used; and by assigning our best estimate of unit costs to each service as a way of estimating total expenditure per patient. This information is reported, where appropriate, in addition to the total outcome score.

### Investigations of validity

We tested independence between process and outcome measures in PREPARED by correlating each of the four process domain scores with the outcome score, for both patients and carers. We did not test correlations between patient and carer groups as we believed that each provided an independent perception of the quality of discharge planning. There were

**Table 4** PREPARED outcome questions for patients and carers

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Satisfied with community service?

Equipment met needs?

Overall satisfied with way hospital prepared patient/carer for returning home?

Free text  
 has anything been done to deal with your worries about managing at home?  
 have any unexpected problems occurred?

Use of health services in the week post-discharge (patient/carer): general medical practitioner, specialist medical doctor, physiotherapist, pharmacist, occupational therapist, meals-on-wheels, domiciliary care, district nurse, hospital outpatient/emergency clinic, other?

Use of home support services: home modifications, assistance with shopping, house cleaning, other?

Extra out-of-pocket expenses: taxi fares, petrol, extra shopping, private health services, extra pharmacy costs, extra electricity?

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**Table 5** Correlations between process and outcome scores

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	Process domain 1	Process domain 2	Process domain 3	Process domain 4
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For patients				
Total outcome score	0.37	0.08	0.07	0.19
For carers				
Total outcome score	0.49	0.50	0.37	0.17

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poor to moderate correlations between the process and outcome scores within each stakeholder group as reported in Table 5, indicating that these measures were of different attributes of discharge planning quality.

We tested the divergent validity of PREPARED, on the hypothesis that it was a measure of consumer perception of the quality of discharge planning activities, independent of patient and carer perception of the health-related quality of their own life (as measured by summary physical and mental health scores [11,20] on the SF-36 instrument) at the time of survey. Pearson correlations (expressed as *r* statistics) identified no instance where there was a relationship stronger than *r*=0.05 between any of the PREPARED process and outcome measures and the SF-36 summary scores. There were no differences in the nature of response by patients with, or without, carers, patients of different age groups or

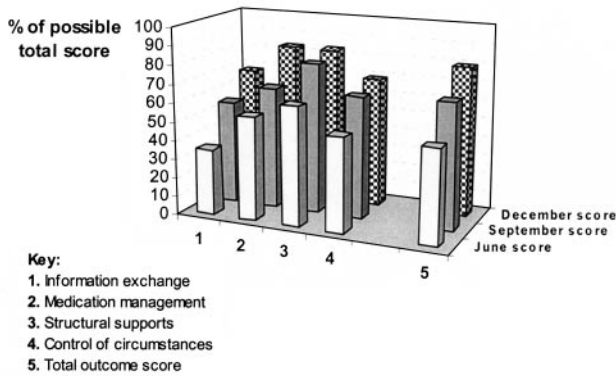
with different diagnostic conditions. We construed this finding to mean that our new instrument assessed aspects not addressed by the SF-36 instrument.

We subsequently assessed the construct and concurrent validity of patient and carer responses to PREPARED by conducting extensive telephone interviews with 40 patients and carers post-discharge who had previously completed PREPARED, and comparing the interview data with the PREPARED responses. The time period between completing PREPARED and the follow-up telephone interview ranged from 3 to 9 weeks. While the interview data provided rich information about patient and carer experiences post-discharge that was not captured in PREPARED, we found that PREPARED in 92% of instances provided appropriate and accurate summary information of patients' and carers' perceptions of quality of planning for discharge whilst in hospital. For example, where subjects indicated in PREPARED that they had received no information on community services, interviews commonly revealed that they had experienced post-discharge misadventures related to lack of appropriate community services, and/or that they had found out about, and organized, community services for themselves post-discharge. Where PREPARED indicated that patients and carers had received sufficient information on medications, then this same message was conveyed at interview, and no medication misadventures or concerns were reported. Comparison of the PREPARED responses and the interview data also highlighted the importance of the standard short time-frame (1 week post-discharge) for consumer evaluation of the quality of discharge planning. It was apparent that there were significant time-related changes that occurred for elderly patients and their carers in managing illness after discharge from hospital, and that apparent failures of PREPARED to capture pertinent information related mostly to issues which had occurred in the second and subsequent weeks following discharge, rather than in the first week.

**Interpretation of PREPARED information through indices of performance**

Our primary motivation in developing PREPARED was to provide information to acute hospital staff on the quality of their discharge planning performance from the perspective of community stakeholders. Expressing this information in simple percentage terms and reporting it back to the individual ward, unit or hospital was expected to assist in monitoring fluctuations in performance over time, and to underpin discussions on improving the quality of discharge planning activities. In each instance data is reported per ward or unit, and can be stratified further by presence (or not) of a carer, or by diagnostic categories, sex or age groups as required.

The mean score for each of the four process domains, the total process score and the total outcome score are expressed as a percentage of the maximum possible score. While standard errors around indices are useful in research projects to assess variability in performance, they have not been considered useful by ward staff for feedback purposes because they detract from the notion of simple and easily understood reporting.



**Figure 1** Hypothetical time-based patients' PREPARED scores, interpreted as indices of performance for report back to hospital staff.

The discharge planning indices were reported to the participating wards in graph form, and feedback was sought from staff on their usefulness in monitoring performance in discharge planning. An example of the type of feedback to hospital staff that can be derived from the PREPARED instrument is provided in Figure 1. Staff have been encouraging in their response to this type of feedback, finding that it has highlighted inconsistencies in discharge planning practice within and across wards, and also indicating that the feedback has identified areas where performance could be improved. A key element for staff in understanding the value of feedback from PREPARED has been in accepting that the responses reflect patient and carer perception of the quality of discharge planning activities. Inconsistencies in feedback and in what ward staff understood to have occurred highlight potential mismatches between information provided by staff and information received by patients and carers [7,9].

Cost and health service use information has not, to date, been fed back to wards in any formal sense as it represents information more relevant to policy makers. Ward staff have indicated that this information is not immediately interpretable in a quality improvement sense.

## Discussion

The PREPARED instrument has been designed to address a deficit in the quality improvement cycle as it currently applies to discharge planning from the acute hospital setting. To date, we have taken a specific focus on aged patients, as the literature, and our previous research, suggests considerable variability in the quality of discharge planning for this group [2,3,8]. However, the generic concepts in PREPARED would probably render it applicable to other patient groups.

PREPARED offers feedback from community consumers of discharge planning activities to the providers. Ours is the first instrument we are aware of in Australia that can be used to collect this information, and hence offers scope for ongoing research as well as quality monitoring and improvement

activities. We have provided evidence of the independence of PREPARED, as well as its performance in eliciting information on perceptions of quality of discharge planning from the perspective of elderly English-speaking recently discharged medical and surgical patients, and their carers.

When developing PREPARED, we highlighted slippage between perceptions of quality of discharge planning activities between hospital staff, patients and carers. Hospital staff were concerned mainly about time-constrained process issues in planning discharge, whereas patients and carers took a longer-term view of processes and outcomes. This finding is echoed in the literature, in which the majority of hospital-based research into discharge planning focuses on assessment of need, and development and implementation of plans [2, 5,6]. Few hospital-based outcome measures for discharge planning are described or evaluated in the literature [3]. We became aware of commonalities and differences in the way that hospital staff and community consumers evaluated the quality of discharge planning. Patients and carers were more oriented than ward staff towards coping after leaving the hospital. On the other hand, aspects of discharge planning that were highly and equally valued by patients, carers and hospital staff were:

- communication with, and education of, the patient;
- provision of information on medications;
- provision of information on community service and equipment needs.

These findings highlight the importance of identifying sensitive measures of discharge planning quality that are valued by all stakeholders, and whose time-frame extends beyond the moment of discharge.

There is a growing number of instruments that purport to test patient quality of life and satisfaction, and thus it was important to ensure that PREPARED added a new dimension [21]. We chose to test its divergence from the SF-36 health-related quality of life instrument [11] as the latter is in common use in Australia and measures a broad range of health constructs, and its population norms have been developed from randomly sampled age groups containing both well and unwell individuals [20]. Our findings suggest that PREPARED provides different information than that provided by the SF-36, and coupled with its good performance in comparison with reflective interview data, we are confident that it offers a sensitive means of assessing patient perceptions of quality of discharge planning processes and outcomes. As PREPARED is developed further for specific conditions or health settings, it may be appropriate to test also its congruence with other measures of quality of life, or satisfaction.

Discussions with hospital staff, after providing them with feedback from PREPARED, suggest that the indices of performance are useful in providing an objective set of measures regarding opportunities for improvement in discharge planning practices. However, further research and experience with applying the instrument in different settings is required to develop an understanding of what improvements are possible after concerted effort by ward staff, based on information from PREPARED. Moreover, further

testing is needed to determine whether the PREPARED instrument is responsive to measuring changes in discharge performance following interventions to address specific aspects of quality.

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