

Discharge Planning Scale: Community Physicians' Perspective

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BACKGROUND: Adverse events occur when patients transition from hospital to outpatient care. For quality improvement and research purposes, clinicians need appropriate, reliable, and valid survey instruments to measure and improve discharge processes.

OBJECTIVE: The objective of this study was to validate the Modified Physician-*PREPARED* scale to measure qualities of hospital discharge from the outpatient physician perspective. Descriptions include item development and psychometric properties.

METHODS: The design was a postal survey of outpatient physicians/practitioners who followed 403 patients who were discharged from hospital to home. We mailed questionnaires 10 days after discharge. Questionnaire items assessed perceptions of quality and outcome of discharge planning and communication. Analysis yielded the Modified Physician-*PREPARED* scale value: the sum of scores from 8 items. Internal consistency and construct validity were assessed.

RESULTS: Survey response rate was 76%. Mean Modified Physician-*PREPARED* scale value was 16.6 ± 4.0 with range 8 to 24. High scores reflected high perceptions of discharge quality. Analysis identified 2 principal components: timeliness of communication, and adequacy of discharge plan/transmission. The scale had acceptable internal consistency (Cronbach's alpha 0.86) and construct validity. When considering the discharge planning and communication for a specific patient, outpatient primary care physicians reported higher scores when they were involved in the discharge planning ($P < 0.001$) and when they were aware of community support services ($P = 0.002$).

CONCLUSIONS: The Modified Physician-*PREPARED* scale measured outpatient physician perceptions of quality of hospital discharge to home. Clinicians and researchers may find the scale useful to evaluate discharge processes. *Journal of Hospital Medicine* 2008;3(6):455-464. © 2008 Society of Hospital Medicine.

KEYWORDS: continuity of patient care, patient discharge, psychometrics, health care surveys.

Preventable adverse events occur when patients transition from hospital to outpatient care.^{1,2} The most common cause for postdischarge adverse events is poor communication between inpatient healthcare providers and outpatient primary care physicians.¹ Adverse events also occur because of inadequate processes to communicate unresolved problems, monitor drug therapies, or monitor the patient's overall condition.¹ Efforts to reduce adverse events logically focus on effective discharge planning and communication.

Systematic reviews have evaluated clinical trials to improve discharge planning and communication.³⁻⁶ Reviewers often reported inconclusive results because of a shortage of high-quality

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trials with validated outcome measures.³⁻⁵ Reviewers recommended future studies to develop and validate outcome measures that assessed the discharge process from various perspectives.⁴ One important perspective was the assessment by the outpatient, primary care physician who was responsible for patient care after discharge.⁷⁻⁹

One of the authors (K.G.S.) developed the Physician-*PREPARED* questionnaire to measure perceptions of outpatient physicians about the quality of hospital discharge. Item content came from studies in Australia that investigated barriers to best practice in discharge planning for older patients.¹⁰⁻¹³ Fifteen items asked community physicians about their awareness of discharge planning processes for their patients. Items also assessed the adequacy of information provided about discharge plans. The Physician-*PREPARED* items underwent assessment in Australia. Evaluation revealed well-worded text, unambiguous response options, face validity, and content validity.

We reconsidered the Physician-*PREPARED* questionnaire when we designed a clinical trial to assess the value of a discharge intervention in the United States. Our goal was a comprehensive survey instrument and scale to measure the perceptions of outpatient physicians after the discharge intervention. We found no other appropriate, validated questionnaires except the Physician-*PREPARED*. However, we recognized some limitations to the Physician-*PREPARED*. The items were developed for Australian physicians who treated elderly patients. We wanted to assess North American physicians who cared for a broad age range of adults. The Physician-*PREPARED* did not have a scale with validated, psychometric performance characteristics in our population. We decided to address the above limitations with a scale development and validation study in the United States.

In the present work, we describe item development for the Physician-*PREPARED* that occurred in Australia. Then we present item reduction and validation for the Modified Physician-*PREPARED* that occurred in the United States. Our primary objective was to validate a scale to measure perceptions of outpatient physicians about qualities of discharge planning and communication. The secondary objectives were to quantify the scale's internal consistency and construct validity. Our goal was a brief scale with ac-

ceptable, defined statistical properties for clinicians and researchers.

PATIENTS AND METHODS

Item Development for the Physician-*PREPARED*

Australian investigators designed the Physician-*PREPARED* survey instrument to measure the quality of discharge planning activities and communication. The investigators developed the survey with the following process that was not published previously. First, a literature review identified survey content germane to outpatient practitioners.¹⁰ Investigators conducted interviews, focus groups, and pilot surveys to prioritize items for the survey instrument. The volunteer subjects for item development were general medical practitioners in Adelaide and Sydney, the capital cities of two states in Australia. The draft instrument was circulated to a small group of general medical practitioners for comment on layout, wording, and question intent. After feedback, minor modifications were made to item content and response categories. The result of development in Australia was a survey instrument with 15 items (see Appendix). The items reflected the following key areas of discharge quality: timeliness of communication, patient health status at discharge, adequacy of discharge support services, discharge medication information, and reasons for medication changes. These areas were congruent with the results of other investigators who assessed the quality of discharge planning and communication.^{14,15}

Validation of the Modified Physician-*PREPARED*

The validation study for the Modified Physician-*PREPARED* occurred in Illinois. The Peoria Institutional Review Board approved and monitored the human research. The patient sample for validation was a prospective cohort from a cluster randomized clinical trial. Willing patients or their proxies provided written consent for study participation. Patient enrollment occurred between December 2004 and August 2006. The subjects for scale analysis were the outpatient primary care physicians or practitioners designated by patients in the cohort. Outpatient physicians and practitioners gave implied consent when they completed and returned questionnaires. Follow-up was 10 or more days after the patient's discharge from an acute care, 730-bed, teaching hospital.

Patient Inclusion Criteria

Trained research coordinators identified all consecutive adult inpatients who were discharged to home by internal medicine hospitalist physicians. Patient inclusion in the cluster-randomized trial required a probability of repeat admission (*Pra*) score greater than or equal to 0.40.^{16,17} Consequently, the patients in the scale analysis cohort had the same high probability for repeat admission. The *Pra* score came from patient or proxy responses to questions about age, prior hospitalizations, prior doctor visits, self-rated health status, and other health-related questions.^{16,17} In previous validation studies with elderly outpatients, a *Pra* score above 0.5 predicted that patients would have 1 hospital admission per person-year of survival.¹⁶ In other validation studies with inpatients aged 18 to 101 years, the *Pra* items predicted non-routine discharge planning needs.¹⁸

Exclusion Criteria

The exclusion criteria were designed to enroll a cohort with homogeneous risk for readmission. We excluded patients if their discharge destination was a nursing home, another acute care hospital, or an inpatient rehabilitation unit. Hospice patients were excluded if life expectancy was less than 6 months as estimated by the hospitalist. We also used exclusion criteria to avoid illogical enrollments. If the designated outpatient primary care physician or practitioner also managed the patient during the index hospitalization, then there was no perceived barrier to communication and the patient was excluded. Cognitive impairment was a conditional exclusion criterion. We defined cognitive impairment as a score less than 9 on the 10-point clock test.¹⁹ A patient with cognitive impairment could participate with consent from a legally authorized representative. Before we enrolled a cognitively impaired patient, we required a proxy who spent a minimum of 3 hours daily with the patient and who agreed to answer interview questions.

Baseline Assessment

During the index hospitalization, trained data abstractors recorded baseline patient data to calculate the *Pra*: age, gender, diabetes mellitus, and ischemic heart disease. Patients or proxies provided the number of hospital admissions and doctor visits during the year before the index hospitalization. We recorded the availability of an

informal caregiver in response to the question, "Is there a friend, relative or neighbor who would take care of you for a few days, if necessary?" Patients rated their health status on the following scale: poor, fair, good, very good, and excellent. In addition, we recorded heart failure and chronic obstructive pulmonary disease because of their possible association with readmission.^{20,21} Information about outpatient physicians or practitioners came from the hospital's administrative database and was limited to specialty training.

Discharge Process

At the end of the index hospitalization, hospitalists and ward nurses used standardized forms for discharge diagnoses, prescriptions, instructions, and appointments. Discharge planning nurses or social workers consulted with hospitalists and ward nurses and then coordinated service providers including home health nurses, physical therapists, home health aides, homemaker service providers, durable medical equipment vendors, home oxygen vendors, home infusion pharmacists, social workers, rehabilitation service providers, legal aid providers, and others. Patients designated an outpatient primary care physician or nurse practitioner or physician assistant to receive discharge reports and results of diagnostic tests. Ten days after discharge, research personnel mailed the Physician-PREPARED questionnaire to the designated outpatient primary care professional.

Item Reduction and Scoring

To develop a scale, we selected items from the Physician-PREPARED survey instrument (see Appendix). Our goal was a parsimonious, comprehensive, and valid scale for use in clinical and research environments. We applied item reduction techniques according to the following steps that were defined a priori. First, we deleted items with nominal response categories that lacked graded or ordinal characteristics. This exclusion criterion caused us to delete the following items from the questionnaire in the appendix: (1a) "Who made you aware of the admission," (2a) "Who made you aware of the patient's discharge," and (5a) "How did you receive this information?" We deleted open-ended questions, such as: (13) "Have you any suggestions how the patient's discharge could have been improved?" Next, we excluded items with a large proportion of missing responses because respondents checked "Not applicable."

Only item 12 from the Physician-PREPARED fulfilled the latter criterion (see Appendix). Question 12 asked, "Has the patient's caretaker voiced any concerns that they have not been coping since the patient was discharged?" Among 403 respondents, 52% answered question 12 as "Not applicable."

Measures of Construct Validity

We used 3 measures of construct validity in our assessment of the Modified Physician-PREPARED scale. The first construct item asked the outpatient practitioner, "Were you involved at all in planning the patient's discharge?" The first construct was relevant because involvement by outpatient physicians improves the quality of hospital discharges.²² The second construct item asked, "Are you aware of any community support services that are involved in providing assistance to the patient since discharge?" For the third construct, we asked (Appendix item 11), "Has the patient voiced any concerns that they have not been coping since discharge?" We chose community support services and patient coping because these are clinically relevant and correlated with patients' perceptions of discharge preparedness.²³ When we assessed construct validity, our hypotheses were significantly higher Modified Physician-PREPARED scale values for respondents who answered "yes" to the construct questions about involvement and awareness and answered "no" to the question about patient-voiced concerns.

Analysis

Analyses were performed with SPSS PC (version 14.0.2; SPSS Inc, Chicago, Illinois). We reported descriptive statistics as means, standard deviations (SDs), and range for interval variables; median and range for ordinal variables; and percentages for nominal variables. While developing the scale, the unit of analysis was the physician response to a unique patient. Specific descriptive analyses used the unique respondent as the unit of analysis. To determine the internal consistency of the scale, we calculated Cronbach's alpha with SPSS RELIABILITY. We assessed the distribution of the Modified Physician-PREPARED scale with visual and statistical tests for skewness. While using the SPSS FACTOR program, we performed principal components extractions and then rotated components using the oblique promax technique. Component scores were saved using the regression score procedure. Component loadings above 0.30

TABLE 1
Baseline Characteristics of 403 Patients in the Sample Used to Develop the Modified Physician-PREPARED Scale

Characteristic	Number (%)
Gender, female	235 (58.3%)
Race	
White	284 (70.5%)
Black	116 (28.8%)
Other	3 (0.7%)
Self-rated health status	
Poor	125 (31.0%)
Fair	202 (50.1%)
Good	61 (15.1%)
Very good	13 (3.2%)
Excellent	2 (0.5%)
Diabetes mellitus	226 (56.1%)
Chronic obstructive pulmonary disease	76 (18.9%)
Ischemic heart disease	165 (40.9%)
Heart failure	90 (22.3%)
Hospital admissions during prior year (includes index admission)	2.2 (2.0) [0-15]*
Age (years)	53.6 (15.1) [19-98]*
<i>Pra</i> score	0.49 (0.07) [0.40-0.70]*

Abbreviation: *Pra*, probability of repeat admission.

*Values are mean (SD) [range].

were considered for interpretation.²⁴ Statistical inference tests were the Mann-Whitney U for median differences for 2 groups, the Kruskal-Wallis for more than 2 groups, and Spearman correlation for associations. The accepted level of significance was $P < 0.05$.

RESULTS

Description of Validation Cohort for the Modified Physician-PREPARED

We sent questionnaires to the primary care physician, nurse practitioner, or physician assistant designated by 549 patients. The survey response rate was 76% (417/549). If a respondent failed to check any response option for 2 or more scale items, then the questionnaire was excluded from analysis. We excluded 3% (14/549) of questionnaires for failure to respond to items. The responses from the remaining 403 questionnaires were analyzed. We did not exclude questionnaires from respondents who followed homebound patients or other patients who failed to come to the clinic for post-discharge visits. Our analysis included 90 questionnaires (22%) from respondents who had no contact with the patient after discharge.

The patient characteristics appear in Table 1. Most of the patients were less than 65 years old

TABLE 2
Modified Physician-PREPARED Items from 403 Questionnaires with Descriptors for Response Scoring System and Number of Respondents for Each Score, n (%)

Item Text	Descriptor for Score = 1	Descriptor for Score = 2	Descriptor for Score = 3	No Score
1. When were you made aware that this patient had been admitted to hospital?	Not at all; 55 (13.6%)	After patient was discharged; 65 (16.1%)	Prior to hospitalization; while patient was in hospital; or on the day of discharge; 281 (69.7%)	Missing response; 2 (0.5%)
2. When were you made aware that the patient was going to be discharged?	Not at all; 115 (28.5%)	Within a week after discharge; or longer than a week after discharge; 61 (15.1%)	While patient was still in hospital; or on day of discharge; or within 1-2 days after discharge; 225 (55.8%)	Missing response; 2 (0.5%)
3. How soon after discharge did you receive any information (in any form) relating to this patient's hospital admission and discharge plans?	Longer than a week; or not received; or other 115 (28.5%)	Within a week; 186 (46.2%)	Within 1-2 days; 101 (25.1%)	Missing response; 1 (0.2%)
4. Was this sufficient notice to address this patient's postdischarge needs?	Less than sufficient; 98 (24.3%)	Sufficient; 246 (61.0%)	More than sufficient; 46 (11.4%)	Missing response; 13 (3.2%)
5. Have you received adequate information about this patient's discharge health status?	No; 103 (25.6%)		Yes; 295 (73.2%)	Missing response; 5 (1.2%)
6. Have you received adequate written information about the patient's medicines and medication management?	Less than adequate; or no information at all; 103 (25.6%)	Adequate; 262 (65.0%)	More than adequate; 38 (9.4%)	Missing response; 0 (0%)
7. Did you receive sufficient reasons for changes in medication? (For example, why 1 type of medication is used in preference to another?)	Less than sufficient; or no information at all; 129 (32.0%)	Sufficient; or not applicable (there was no change in medications); 240 (59.6%)	More than sufficient; 29 (7.2%)	Missing response; 5 (1.2%)
8. In your opinion, how adequate were the discharge plans to assist this patient to assume safe, independent community living?	Less than adequate; or no discharge plans; 82 (20.3%)	Adequate; 276 (68.5%)	More than adequate; 32 (7.9%)	Missing response; 13 (3.2%)

(77%, 310/403). Many patients had chronic diseases including diabetes mellitus, ischemic heart disease, heart failure, or chronic obstructive pulmonary disease. Most patients, 81% (327/403), rated their health as poor or fair and 55% (223/403) had 1 or more hospital admissions during the year before their index admission. The questionnaire respondents were primary care physicians who practiced internal medicine (41%, 167/403), medicine-pediatrics (27%, 108/403), family practice (24%, 97/403), or other specialties (3%, 10/403). Nurse practitioners or physician assistants completed 5% (21/403) of questionnaires.

We conducted descriptive analyses that treated the respondent as the unit of analysis. There were 172 unique respondents. The number of questionnaires per respondent ranged from 1 to 20 with a median of 1 questionnaire. Respondents varied in the time to return a questionnaire. We measured response time as the difference between the date we received the questionnaire and the date of discharge. The response time ranged from 10 to 90 days with a median of 21 days after discharge.

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Modified Physician-PREPARED: Item Reduction, Internal Consistency, and Score Distributions

The questionnaire items appear in the Appendix. After item reduction, there were 8 items included in the Modified Physician-PREPARED scale analysis (Table 2). None of the 8 items caused substantive reduction in Cronbach's alpha, so all were

TABLE 3
Pattern Matrix from Principal Component Analysis of 403 Questionnaires: Oblique Factor Loadings for 8 Items in Modified Physician-PREPARED Scale

Item Text	Component	
	Adequacy of Discharge Plan/Transmission	Timeliness of Communication
7 Did you receive sufficient reasons for changes in medication? (For example, why one type of medication is used in preference to another?)	0.900	-0.132
6 Have you received adequate written information about the patient's medicines and medication management?	0.849	-0.056
4 Was this sufficient notice to address this patient's postdischarge needs?	0.796	0.050
5 Have you received adequate information about this patient's discharge health status?	0.774	0.012
8 In your opinion, how adequate were the discharge plans to assist this patient to assume safe, independent community living?	0.744	0.132
3 How soon after discharge did you receive any information (in any form) relating to this patient's hospital admission and discharge plans?	0.403	0.373
1 When were you made aware that this patient had been admitted to hospital?	-0.154	0.964
2 When were you made aware that the patient was going to be discharged?	0.123	0.779

retained. The 8-item scale had acceptable internal consistency (Cronbach's alpha = 0.86). For an individual questionnaire, the sum of the scores for eight items yielded the Modified Physician-PREPARED scale value. High scale values reflected high perceptions of discharge quality. Each of the 8 items correlated significantly and positively with the scale value ($P < 0.001$, 2-tailed).

Table 2 shows the distribution of responses to each item in the Modified Physician-PREPARED questionnaire. There were substantial ceiling effects for 2 individual items. One of the 7 items with 3 response options had ceiling effects approaching 70% (item 1). One item had 2 response options and 73% responded yes (item 5). The distribution of Modified Physician-PREPARED scale values for 403 questionnaires had mean 16.6 ± 4.0 SD and skew -0.6 (standard error of skew = 0.1). When scale values of patients 64 years and younger were compared with those of 65 and older, there were no significant differences ($P = 0.606$). The scale values did not have noteworthy floor or ceiling effects. The distribution of scale values showed 1.2% (5/403) of respondents had the lowest score of 8 and 1.7% (7/403) had the highest score of 24.

Modified Physician-PREPARED: Principal Component Analysis

The purpose of the principal component analysis was to evaluate the relationships between the

items and domains. In the component analysis, we evaluated the correlation matrix of the 8 items in the Modified Physician-PREPARED scale. The Kaiser-Meyer-Olkin statistic of 0.89 indicated sufficient sampling adequacy to extract components from the matrix. Principal components extracted 66% of the variance associated with the 8-item scale. After inspection of scree plots, we determined that 2 components were extracted before the eigenvalue fell substantially below 1. The pattern matrix for the promax rotation was inspected and the factor loading for each item appears in Table 3. The item content identified 1 component as timeliness of communication. The other component was adequacy of discharge plan/transmission. Within the adequacy component, the item content addressed patient health status, medication information, and reasons for medication changes. All items loaded primarily on 1 of the components; except item 3, which loaded on both components.

Modified Physician-PREPARED: Construct Validity

We compared Modified Physician-PREPARED scale values between dichotomous groups defined by construct variables. When considering the discharge planning and communication for a specific patient, outpatient primary care practitioners reported higher scale values when they were involved in the discharge planning (median [25%, 75%] = 19 [19, 20.5]) than when they were not

involved (17 [12.4, 19], $P < 0.001$). In addition, outpatient practitioners responded with higher scale values when they were aware of community support services (18 [16, 20]) than when they were unaware (17 [12, 19], $P = 0.002$). There was a non-significant trend to higher scale values if patients voiced no concern about coping after discharge (18 [15, 19]) versus concern (17 [12, 19], $P = 0.059$). For all 3 constructs, the analysis revealed higher Modified Physician-PREPARED scale values that were in the same direction as hypothesized. We approximated the construct analysis with subscales defined by the principal components (data not shown). The subscale analysis confirmed the direction and significance of the analysis with the full, 8-item, Modified Physician-PREPARED scale.

Modified Physician-PREPARED: Correlations with Baseline Characteristics

We evaluated the correlations between a patient's Modified Physician-PREPARED scale value and baseline characteristics in Table 1. Patient characteristics were not associated with scale values. We also assessed the median differences between the scale values by practitioner specialty and found no significant differences.

DISCUSSION

The Modified Physician-PREPARED scale measured the quality of discharge planning and communication from the perspective of the outpatient primary care physician or practitioner. We described the derivation of the scale items. We demonstrated the reliability and validity of the scale among physicians and practitioners who provided postdischarge care to patients at high risk for readmission to the hospital. The item content included timeliness, adequacy, patient health status, medication information, and reasons for medication changes.

According to expert consensus guidelines for hospital discharge care, the communication with the outpatient primary care physician should occur as soon as possible after discharge.²⁵ Recommended data elements in the communication include condition at discharge, diagnoses, medications added, medications discontinued, and medications changed.²⁵ We found the Modified Physician-PREPARED scale items included content that was consistent with expert consensus

guidelines. The items also assessed timeliness and adequacy, 2 domains important to outpatient physicians.^{14,26}

The Modified Physician-PREPARED is one of several questionnaires developed to measure qualities of discharge processes from the perspective of outpatient physicians.^{8,15,27-33} Previous questionnaires did not report psychometrics except 1 that assessed the quality of discharge summaries and measured test-retest reliability.³³ We are not aware of other physician questionnaires with reliable or valid scales besides the Modified Physician-PREPARED.

We believe 1 application of the Modified Physician-PREPARED questionnaire is in quality improvement efforts within hospitals. Most hospitals and inpatient physicians rely on discharge letters or summaries to communicate information about the hospitalization to outpatient practitioners.⁶ However, systematic problems with generation and transmission of letters and summaries make them sometimes unreliable as sources of consistent, timely, accurate, or important information.⁶ When patients arrive for their posthospital visits, their outpatient physicians have received no discharge letter for 16% to 53% of patients and no discharge summary for 66% to 88%.⁶ Among outpatient physicians, 41% attribute preventable adverse events for at least 1 of their patients to inadequate discharge communication.³⁴ One hospital accreditation organization includes discharge communication improvement as a national patient safety goal in the United States.³⁵ Hospitals have multiple motivations to pursue quality improvement projects related to discharge communication: reduction in adverse events, relation with referring physicians, and accreditation by regulators. When surveying physicians, hospital personnel may wish to use a reliable and validated instrument like the Modified Physician-PREPARED questionnaire.

Another application of the Modified Physician-PREPARED scale is in research. An example is our randomized, controlled trial to measure the value of a discharge intervention. We published the rationale and design for our intervention.³⁶ In the future, we will analyze the results of our trial and we will need validated scales. One of the trial outcomes is the perspective of the outpatient physician. We expect to compare the scores on the Modified Physician-PREPARED scale values from community practitioners who treated test patients

versus control patients. The statistical properties of the Modified Physician-PREPARED scale that we validated in the current work will allow us to estimate the precision of between-group differences and to perform tests of inference.

The results of our study should be interpreted in the context of strengths and limitations. We were able to generalize the validity of the Modified Physician-PREPARED to North American primary care physicians who treated adult outpatients with a broad age range. We minimized biases with the high survey response rate and low proportion of missing responses. During validation, we asked physicians to evaluate patient transitions from hospital to home. Consequently, the Modified Physician-PREPARED scale may not apply when doctors follow patients after discharge to nursing homes or other acute care facilities. We excluded patients with low probability of repeat admission: hospice patients and patients with low *Pra* scores. The purpose of our exclusion criteria was to enrich the sample with patients likely to benefit from interventions to improve discharge processes. We recognize that the Modified Physician-PREPARED may not generalize to physicians who

treat hospice patients or patients with low probability for readmission.

Additional limitations relate to test-retest reliability and to the clinical meaning of small changes in scale values. In our study, physician respondents returned questionnaires approximately 3 weeks after hospital discharge. We did not ask physicians to complete the questionnaire again after they returned the first questionnaire. Therefore, the test-retest reliability for the Modified Physician-PREPARED is unknown. Our protocol was not designed to detect the minimum important difference in the scale values. Consequently, small changes in scale values have uncertain clinical relevance. Future studies are necessary to assess the minimum important difference in the scale values.

CONCLUSION

The Modified Physician-PREPARED scale was a reliable and valid measure of outpatient physician perceptions of quality and communication after hospital discharge. Clinicians and researchers may find the scale useful to guide, assess, and compare discharge-planning activities.

APPENDIX: PHYSICIAN-PREPARED QUESTIONNAIRE

Item	Question	Response Options
1	When were you made aware that this patient had been admitted to hospital?	Prior to hospitalization While patient was in hospital On the day of discharge After patient was discharged Not at all
1a	Who made you aware of the admission?	Hospital ward staff Discharge planner Hospital medical staff Ambulance Patient Patient's family/friends Other, please specify _____
2	When were you made aware that the patient was going to be discharged?	While patient was still in hospital On day of discharge Within 1-2 days after discharge Within a week after discharge Longer than a week after discharge Not at all
2a	Who made you aware of the patient's discharge?	Hospital ward staff Discharge planner Hospital medical staff Patient Patient's family/friends Other, please specify _____

(continued)

APPENDIX
(continued)

Item	Question	Response Options
3	How soon after discharge did you receive any information (in any form) relating to this patient's hospital admission and discharge plans?	Within 1-2 days Within a week Longer than a week Not received Other, please specify _____
4	Was this sufficient notice to address this patient's postdischarge needs?	More than sufficient Sufficient Less than sufficient
5	Have you received adequate information about this patient's discharge health status?	Yes No
5a	How did you receive this information? (Check all that apply)	Telephone call Fax Electronic mail system Written/typed letter
6	Have you received adequate written information about the patient's medicines and medication management?	More than adequate Adequate Less than adequate No information at all
7	Did you receive sufficient reasons for changes in medication? (For example, why 1 type of medication is used in preference to another?)	Not applicable (there was no change in medications) More than sufficient Sufficient Less than sufficient No information at all
8	In your opinion, how adequate were the discharge plans to assist this patient to assume safe, independent community living?	More than adequate Adequate Less than adequate No discharge plans
9	Were you involved at all in planning the patient's discharge?	Yes No
10	Are you aware of any community support services that are involved in providing assistance to the patient since discharge?	Yes No
11	Has the patient voiced any concerns that they have not been coping since discharge?	Yes No Not applicable (no contact with patient since discharge)
12	Has the patient's caretaker voiced any concerns that they have not been coping since the patient was discharged?	Not applicable (no caretaker) Yes No Not applicable (no contact with caretaker since discharge)
13	Have you any suggestions how the patient's discharge could have been improved?	_____ _____ _____

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