Process Evaluation of an Integrated Model of Discharge Planning

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Abstract

In this study, a new, empirically-derived model of discharge planning for acutely-ill elderly was evaluated to determine (a) whether it could be implemented in a hospital setting, and (b) what facilitated or challenged the implementation. The process evaluation involved four case studies conducted on three in-patient units of two acute-care hospitals. Data were analyzed using explanation-building and case comparison methods. Three main study results emerged: (a) The integrated model had the potential to be implemented in a hospital setting when certain conditions were in place, (b) use of the integrated approach to discharge planning contributed to patient satisfaction, and (c) the materials developed as part of the discharge planning protocol required only minor formatting modifications in order to be rendered user-friendly. In this article, recommendations are made that will facilitate the model's implementation and utilization in other clinical settings and ongoing and future process evaluations.

Research completed within the last decade has clearly demonstrated that present approaches to discharge planning for the elderly in acute-care hospitals are problematic. These mostly descriptive studies have shown that current practices actually impinge on hospitals' goals of managing resources effectively, providing quality patient care, and ensuring ethical decision making. These findings are of concern in today's context of health care reform, where a greater emphasis is placed on shortening hospital lengths of stay by discharging patients sooner. Elderly patients are often targeted by early discharge programs because they have approximately twice as many hospital admissions and over twice as long an average length of stay than other age groups (McWilliam, 1992). As the number of elderly continues to rise due to falling mortality rates, it is becoming critical to address the discharge-related challenges posed by this population.

Some of the problems associated with current discharge planning approaches include: (a) decisions made inconsistently with the patient's clinical trajectory, that is, often before the medical condition is clear (Dill, 1995; McWilliam, 1992; Wells, 1997); (b) lack of coordination, communication, and leadership (McBride, 1995; McWilliam & Sangster, 1994); and (c) absence of cooperation and support from physicians (Feather, 1993). As a result of these problems, several authors have noted a disparity between the needs identified and planned for in hospital and the patients' actual needs once they return home (Armitage & Kavarnaugh, 1997; Jewell, 1993; Mamon et al., 1992; McBride, 1995; Mistiaen, Duijnbouwer, Wijkel, de Bont, & Veeger, 1997; Perlman Simon, Snow et al., Blumenfeld, Holden, & Wu, 1995; Prescott, Soeken, & Griggs, 1995; Proctor, Morrow-Howell, & Kaplan, 1996; Storer Brown, 1995). Of the several reasons proposed as to why discharge plans are often less than adequate, perhaps the most important may be that patients and families are not systematically involved in discharge planning (Chadwick & Russell, 1989; Congdon, 1994; Coulton, Dunkle, Chou, Haug, & Viehhofer, 1988; Dill, 1995; Dubier, 1988; Jewell; Kadushin, & Kulys, 1994; McWilliam, 1992; McWilliam & Sangster, 1994; Morrow-Howell, Proctor, & Mui, 1991; Proctor, Morrow-Howell, & Lott, 1993; Wells, 1997).

Six studies were found that described models or programs aimed at improving either the process or the outcomes of discharge planning (Evans & Hendrick, 1993; Haddock, 1994; Naughton, Moran, Feinglass, Falconer, & Williams, 1994; Naylor et al., 1994; Sookiehe & Auslander, 1993; Styrborn, Larson, & Drettrn, 1994). These studies found that: (a) the presence of a designated discharge manager, (b) early and systematic communication about the discharge plan, and (c) an explicit discharge planning protocol had positive effects such as decreasing hospital length of stay, decreasing readmission rates, decreasing hospital costs, and increasing patient satisfaction with the discharge plans.

The Integrated Model of Discharge Planning

A qualitative study aimed at developing a more efficient and compassionate discharge planning model
for acutely-ill, elderly patients was recently completed (Wells, Martin, Moorbouse, Craig, & Foley, 1999). Persons from hospitals and community organizations who were directly involved in discharge planning as either practitioners, administrators, or advocates as well as patients and family members participated in a total of 16 focus groups. Participants were asked: "What are your perceptions of an ideal approach to discharge planning?"

Content analysis of the data revealed seven key elements believed to be essential to efficient and effective discharge planning: (a) The patient is central to the planning; (b) discharge planning is directed by a discharge manager; (c) family members, the attending physician, and a community person are core participants in discharge planning; (d) other health professionals are involved only as the need arises; (e) well-working communication systems are in place; (f) the time trajectory of discharge planning is consistent with the patient's clinical and social situations; and (g) action guides facilitate discharge planning. These seven key elements were represented in a model that was operationalized into a protocol comprised of 24 activities. The protocol outlines the timing and process of discharge-related interventions to be completed by a specified discharge manager as well as the other key participants. Protocol activities include an initial assessment of the patient's situation using a structured assessment instrument, the elaboration of initial, updated, and final discharge plans, and telephone follow-up post-discharge.

The purpose of the current study was to evaluate the feasibility of implementing the integrated model of discharge planning in the hospital context. The implementation process was evaluated in order to modify or adapt the protocol so that a summative or outcome evaluation of the model's overall effectiveness could be undertaken in a later study.

Methods

Conceptual Approach Guiding the Evaluation of the Integrated Model of Discharge Planning

A process evaluation was undertaken as a necessary first step towards ultimately studying the outcomes of the integrated model of discharge planning, that is, whether the model could contribute to improving patient outcomes and the efficient use of hospital resources. Conducting a process evaluation ensures that a program, or in this case the discharge planning protocol, is implemented as it was intended (Hawe, Degeling, & Hall, 1990; Rossi & Freeman, 1993). Process evaluations seek to answer four main questions: (a) Are all the activities of the program being implemented? (b) Are participants satisfied with the program? (c) Are all the materials and components of the program of good quality? and (d) Is the program reaching the target group? (Hawe et al.). The present evaluation was designed to answer the first three questions.

Design

A case study design was used in the evaluation. The unit of analysis or case to be studied was the discharge planning according to the protocol. The planning was performed by a discharge manager and occurred from the time the patient was admitted to the hospital in-patient unit to the time the patient was discharged home.

Sample and Sampling

Hospital sample. Two acute-care hospitals in Metropolitan Toronto participated in the process evaluation. These were fully-affiliated university hospitals, one large and one moderately sized. The evaluation occurred on three in-patient medical units: One from the first hospital and two from the second.

Patient and family sample. A total of 4 patients and 1 family member participated in the study. The patients were women over 65 years of age admitted to hospital for acute medical conditions. They were fluent in English and were not cognitively impaired, as judged by their primary nurse. The family member was an elderly spouse.

Ethical approval to complete the evaluation was obtained from the office of Research Services at the University of Toronto and from both hospitals. A person for each of the three in-patient units was designated to assist with recruiting potential study participants. The designated person approached patients meeting sampling criteria and a family member within 12 hours of admission to hospital and explained the study using a letter of introduction. Patients and families agreeing to participate in the study signed a consent form and were given a copy of the form.

Data Collection Procedures

Three discharge managers (DMs), one per unit, participated in the implementation of the model of discharge planning. The first author trained the DMs to implement the protocol and to complete the related dis-
charge planning forms. These included: (a) a standardized assessment, the One Step Client Access Assessment or OSCA (Haliburton-Kawartha-Pine Ridge District Health Council, 1991); (b) initial, updated, and final discharge plant forms; and (c) a record of meetings and contacts. The OSCA provided a comprehensive profile of the patient's situation prior to hospitalization, and was used to flag any changes in that status to determine discharge needs. It had been previously tested on a sample of 194 community elderly and disabled clients and found to be reliable and valid. The other discharge planning forms were piloted in the current study to determine their ease of use and their ability to capture all the necessary data for the process evaluation.

Using a guide, one of the researchers conducted a semi-structured interview with patients and families about their perceptions of the discharge planning process and the final discharge plan. The interviews, lasting between 30 to 60 minutes, were undertaken in hospital 24-48 hours prior to discharge for two of the patients, and via telephone within 24 hours after the patients had returned home in two of the cases. The two face-to-face interviews were taped-recorded. The two telephone interviews were transcribed as close to verbatim as possible.

Using a separate guide, the same researcher conducted a semi-structured interview with each discharge manager after she had implemented the discharge planning protocol for one patient. After a preliminary analysis of the research findings, the researcher met with the three discharge managers as a group to share the results of the study and to obtain comments regarding their impressions of the findings, as well as any other additional insights.

Data Analysis Strategies
The main data analysis strategy used in this study was explanation-building (Yin, 1994). This analytic strategy serves to explain a phenomenon or to stipulate a set of causal links about it. Because the approach was applied to four case studies, the result of the explanation-building process resulted in a cross-case analysis, not simply an analysis of each individual case.

In conjunction with the explanation-building approach, a second data analysis strategy was utilized. Drawing on the work of Charles Ragin (1987, 1992), Marshall (1997, August) describes a method useful for reasoning with case study data. By making an analyti-

cal judgment, one case is selected as the anchor point against which the other cases are compared. In this study, the anchor case was the case that most closely followed the principles of the integrated model. By examining similarities and differences between this best case and the other three cases, an explanation could be constructed to identify the factors that either facilitated or limited the successful implementation of the integrated model of discharge planning in the hospital setting.

Data were content analyzed using a computer software program called The Ethnographer (Seidler, Kjolseth, & Seymour, 1988). Interviews were transcribed, and coded according to distinct topics that were identified. The content or substance of the codes or topics was summarized to identify the patterns of participants' experiences related to the implementation of the integrated model. The research questions were kept close at hand during pattern analysis in order to focus on the data most relevant to the research and to ensure that the study questions were answered.

Results
Can the Integrated Model of Discharge Planning Be Implemented in a Hospital Setting?

The study results showed that the integrated model has the potential to be implemented in a hospital setting. The case studies represented varying degrees of implementation of the discharge planning protocol. The case that most closely resembled the model served as the anchor case, that is, the case against which the three others were compared (Marshall, 1997). In this best case, all the activities of the protocol that were relevant to the patient's situation were implemented as planned. The seven key elements of the integrated model of discharge planning were upheld. Furthermore, the patient was satisfied with the discharge planning and the final plans that were made. In her opinion, "Everything seemed efficient. It was well organized. There was nothing to dislike really except the wait for the ambulance."

The worst case represented the one that least approximated the seven dimensions of the ideal model. In this case, the DM implemented the least number of elements of the discharge planning protocol, and none of the key requirements of the integrated model was upheld. The family member involved in this case described the discharge planning process in the following manner: "No one bothered to tell me anything........
We were like Specimens, not humans. I don’t like being treated like a horse in a stable. They at least have names."

The other two cases were considered intermediate cases. In those instances, the DMs implemented a greater number of elements of the discharge protocol than in the worst case, but not as many as in the best case. In contrast to the best case, the discharge managers in these cases did not fully coordinate the discharge planning process. Other health professionals were not involved as outlined in the protocol. Furthermore, communication in these two cases was not consensus oriented, that is, the discharge managers did not obtain the input of all core participants and final plans were confirmed only with the patient. A complete report of the four case studies can be found elsewhere (LeClerc, 1998).

Comparison of the three least than best cases with the best case led to the identification of facilitators and barriers to the implementation of the discharge planning protocol on the hospital units. The findings were:

(a) the level of commitment of the DM, (b) the medical status of the patient, and (c) the familiarity of the DM with the integrated approach to discharge planning could either facilitate or challenge implementation of the protocol and the upholding of the key elements of the integrated model. For instance, when the DM was highly committed to changing her practice, as in the best case, a greater number of protocol elements were implemented. The DMs found it more challenging to implement the protocol when the patient’s medical condition deteriorated to the point that the patient was no longer able to be involved in planning. One of the DMs implemented the protocol for two patients, and her ability to do so improved with the second patient. Therefore, a greater level of familiarity with the protocol seemed to facilitate its implementation. Additional elements within the hospital setting that potentially could facilitate the protocol’s implementation were also identified. They included: (a) the DM having an office on the in-patient unit, (b) extended hours of work of the DM, (c) the availability of a substitute decision-maker, and (d) discharge planning forms being included in the patient’s hospital chart.

Were Patients Satisfied with the Discharge Planning and the Final Plans That Were Made?

The second major result of the evaluation was that use of the integrated model led to patient satisfaction. The patients in the best and two intermediate case studies were satisfied with the discharge planning and the final plans that were made. The patient and the family member in the worst case were not satisfied with the approach to discharge planning and were unaware of the discharge plans that had been made. Therefore, the findings suggest that patients and families were satisfied when the key elements of the model were either fully or partly upheld, as in the first three cases. Two elements of the model in particular were consistently implemented when patients expressed satisfaction. These were: (a) Patients being central to the process, and (b) decision making following the patients’ clinical and social trajectories. Furthermore, in these three cases, initial assessment of the discharge situation using the OSCA was a protocol activity that was completed as outlined. Therefore, the findings of the evaluation suggest that an initial, comprehensive assessment using a structured instrument also has the potential to affect patient satisfaction.

Were the Discharge Planning Forms Adequate?

The discharge managers were able to use the information gathered on the initial assessment form, the OSCA, to develop discharge plans that were consistent with the patient’s clinical and social situations. They were able to record these plans on the forms that were developed for the evaluation. The forms were found to require minor formatting modifications in order to be more user-friendly. For example, it was recommended that the initial, updated, and final discharge plans forms be consolidated into a single form to avoid the need for repetition. The record of meeting and contacts form would have to be formatted to allow more space for documentation.

Discussion and Recommendations

Discussion

The process evaluation revealed that the discharge planning protocol has the potential to be implemented in a hospital setting and that it is possible to uphold the seven key elements of the theoretical model. The patient’s medical condition, the level of commitment of the DM and the DM’s level of familiarity with the protocol were the main elements that could either enhance or challenge the integrated model’s successful implementation.

Other authors have also found that the patient’s medical condition can render ongoing and meaningful
involvement in discharge planning a challenge (Abramson, 1988; Coulton, Dunkle, Goode, & MacKintosh, 1982; Proctor & Morrow-Howell, 1990; Proctor, Morrow-Howell, Alfaro & Wert, 1992). These authors have indicated that involving a family member or a substitute decision maker would be necessary when patients are not able to make decisions on their own behalf. The integrated model of discharge planning also advocates this practice. However, in our study, involving a substitute decision maker was at times limited by the DM's hours of work and physical location in the hospital. The three DMs worked regular hours during the weekdays, whereas the majority of families visited in the evenings and during the weekend. Because the DMs offices were located away from the in-patient units, they may have missed opportunities to meet with families and other members of the core team.

The finding that when the DM was highly committed, a greater number of protocol activities were implemented is not surprising. Patton (1997) observed that people problems are a commonly documented barrier to program implementation. With the exception of Sokolne and Auslander's study (1993), the empirically tested approaches to discharge planning described in the literature did not discuss whether such people problems occurred in trying to implement their approaches. Sokolne and Auslander concluded that they may not have achieved the desired outcomes because the social workers implementing the discharge planning program may not have adapted their practice. Although the researchers in the current study did not observe these problems first hand, it is believed that the DMs in the process evaluation may have had difficulty changing their practice and may not have been fully committed to the new approach at its onset.

In the three cases where patients expressed dissatisfaction, two key elements of the model were consistently upheld. Those were that the patients were central to the discharge planning process and that the planning followed the clinical trajectory. The research literature on discharge planning supports the conclusion that these two factors are important contributors to patient satisfaction. Several studies have examined patients' and families' perceptions of the discharge planning process. These studies found that patients and their family members were not satisfied with the discharge planning process when they were not consistently involved in decision making (Coslin et al., 1988; Kadushin & Kays, 1994; Jewel, 1993; McWilliam, 1992; McWilliam & Sangster, 1994; Morrow-Howell et al., 1991; Proctor et al., 1992). Wells (1997) found that patients in hospital experienced distress when discharge decisions were made before a diagnosis was established or before the attending physician could accurately predict the outcome of the illness. Therefore, coordinating the discharge planning process so that it is congruent with a patient's clinical trajectory may be an important element contributing to patient satisfaction.

The patients in the process evaluation may also have been satisfied with the discharge planning approach because their situations were assessed using a comprehensive assessment tool. The discharge managers used the OSCA to assess the patient's situation prior to hospitalization, and their discharge plans reflected the information obtained. Although the discharge planning approaches described in the literature included an initial assessment of the patient, only one approach used a structured instrument to collect information on the patient's health and functional status, sociodemographic data, current resource utilization, medical treatment, and drug therapy (Haddock, 1994). Haddock reported that the patients who were assessed using the Long-Term Care Information System (LTCIS) were significantly more satisfied that the control group who received the hospital's usual discharge planning, as indicated on a 4-point Likert response scale ranging from 1 (very satisfied) to 4 (very dissatisfied) (f2(4)=10.52 vs. 1.24, p<0.001). The OSCA used in the process evaluation represents a more comprehensive assessment than the LTCIS. In addition to those areas assessed by the LTCIS, the OSCA also assesses the patient's living situation, ability to manage personal and instrumental activities of daily living, and social supports.

One of the major lessons learned in conducting this process evaluation was that it is essential to evaluate a new program as it is being implemented. The discharge planning protocol was not implemented consistently across all four cases despite the discharge managers receiving the same training and the settings being similar. If the researcher had implemented the protocol or, a large scale and evaluated patient and hospital outcomes without conducting a prior process evaluation, it would not be known what factors influenced the outcomes.

Recommendations

The current study yielded a number of insights into the challenges of implementing new approaches to
practice in real-life contexts. Consequently, several recommendations can be made to facilitate implementa-
tions of the integrated model in other settings. Care-
ful thought should be put into the selection of a dis-
charge manager. Such managers should be highly skilled
practitioners with advanced knowledge about the needs
and care of elderly patients as well as about community
organizations and resources. They should have cred-
ibility within the hospital and the power and authority
to lead the discharge planning process. DMs should be
physically located on the hospital units and well inte-
grated into the functioning of the unit. As well, they
should have good working relationships with other health
professionals and be available for extended hours to
meet with family members and substitute decision mak-
ers. Furthermore, it is recommended that the discharge
managers be allowed a practice phase before the imple-
mentation process is evaluated. The evaluator should
be present during the practice phase to problem solve
and provide ongoing feedback. As well, the evaluator
should review completed discharge planning documents
during the practice phase to clarify questions and as-
sess problem areas.

This study has evaluated a new, theoretical model
of discharge planning for the hospitalized elderly. The
results have shown that the integrated model has the
potential to be used in hospitals. Despite organizational
factors that are a reality in today's hospital system, it is
possible to plan for hospital discharges in a manner that
is attentive to patients' rights to autonomy and self-
determination, as well as to the careful use of scarce
hospital resources. If all key elements of the model are
upheld, it appears likely that the use of the integrated
model would lead to positive outcomes for patients and
families while also addressing organizational objectives.
A funded study using case comparisons and relatively
large samples is currently underway to evaluate this
assumption.

The study has also determined that process evalu-
ation is critical when new programs are implemented in
practice settings. The translation of theory into practice
is not always straightforward. Even the most well de-
signed program may need to be adapted to be rendered
congruent with the particularities of the setting in which
it is being used and with the needs of its users.

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