

**CATEGORY:**

***INNOVATIONS, BEST PRACTICE AND QUALITY INITIATIVES***

**FROM HOSPITAL TO HOME:  
A POST – DISCHARGE  
TELEPHONE SURVEY**

**SUBMITTED BY:**

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## ABSTRACT

**Background:** Hospitals should routinely monitor the effectiveness of the discharge planning process to identify any improvement opportunities, and demonstrate the organization's commitment to patient safety and quality of care (Forster, et. al, 2004). While patient safety has received much attention, few studies have investigated adverse events occurring after discharge from hospital. This study determined the incidence, severity and type of adverse event in patients discharged from the adult acute care medical and surgical services of two Newfoundland acute care teaching hospitals.

**Methods:** 71 patients discharged from a teaching hospital were prospectively studied during an 8 week period. Patients discharged from an adult acute care medical or surgical floor (including cardiology and gynecology patients) between January and June 2004 were contacted by telephone by the Manager Discharge Planning. Charts were reviewed electronically prior to contact. The type, incidence and severity of adverse events were recorded.

**Results:** 26.7% of the patients included in the study reported an adverse event after discharge from hospital. The most common adverse events were symptom management (53%) which included leg swelling, pain, diarrhea, wound drainage and dehiscence, hiccups, depressed mood, reddened IV site, and numbness, 37% were related to wound problems, and 5.3% related to a prescription error.

Acute care hospitals have a mandate to provide appropriate secondary and tertiary care in an efficient and effective manner. Appropriate and timely discharge planning supports patient flow and accessibility to services. Discharge from hospital can be a major event for both the patient and family, placing responsibility on the health care organization to provide a discharge plan that meets the needs of the patient (Salter, 2002).

Until April 1, 2005, the Health Care Corporation of St. Johns (HCCSJ) was the largest health care organization in Newfoundland and Labrador, providing health care services to the St. John's region, with a local population of 200,000. The HCCSJ was also the tertiary centre for the province. The Corporation managed six sites: four acute care hospitals and two continuing care and rehabilitation hospitals. In light of recent published research about patient safety and adverse events, the Admissions Management Department was requested to survey patients post-discharge. The purpose of the telephone survey was two-fold: first, to evaluate the impact of the planned interventions on the patient's recuperation and identify recurrent or new care needs and secondly, to assess the effectiveness and efficiency of our discharge planning process from a patient safety perspective.

An adverse event is defined as an injury that results from medical management versus disease process (Forster, Murff, Peterson, Ghandi, and Bates, 2003). For the purpose of this study, an adverse event was considered to have occurred if the patient experienced new or worsening symptoms that precipitated an unplanned visit to a physician or emergency department, or if an intervention, test or treatment was required.

## **Method**

There are approximately 17, 500 adult acute care discharges annually from the adult medical, surgical and gynecology units of the HCCSJ. Of this, 8400 (48% of discharged patients) are referred to Health and Community Services for follow up. The Manager of Discharge Planning conducted a patient survey of selected patients who had been referred to Health and Community Services for nursing care referral. The reason for including only those patients who had received referrals to Health and Community Services was to determine if the patients identified as requiring post discharge follow up had their discharge needs met.

Prior to the survey all patient electronic charts were reviewed so that individualized questions could be asked if necessary. It should be noted that any patients who were found to have dementia or mental health co morbidities that would affect thought processes were excluded from the survey. The sample size for this study was 71 patients, which represented approximately 10% of the monthly Community Health Referrals received for both sites (see Table 1).

**Table 1: Patient Demographics**

<b>Post Discharge Sample Group</b>	
Sample Number	n = 71
Age Range	20-93 years
Median Age	60 years
Males	36 (51%)
Females	35 (49%)
Surgery Program	42 (59%)
Medicine Program	27 (38%)
Women’s Health	2 (3%)

Consent was obtained by the patient/caregiver before taking part in the telephone interview. If consent was given, a semi-structured interview was performed using a standard questionnaire (see Table2).

**Table 2: Survey Questionnaire.**

<ol style="list-style-type: none"> <li>1. How are you doing since you were discharged from hospital?</li> <li>2. Have you had any difficulty caring for yourself at home after discharge? If yes, please explain.</li> <li>3. Were all the discharge instructions clear such as prescription, follow-up appointments and medications?</li> <li>4. Did the Community Health Nurse visit you or were you asked to go to a nursing clinic? If you were asked to go to a clinic, did you feel well enough/strong enough to go? to the clinic?</li> <li>5. Were you satisfied with the amount of time you had to plan for your discharge? Were you informed the same day or were you told the day in advance?</li> <li>6. Did you have to make any unexpected visits to either your family doctor or the emergency department since you have been home? If yes, please explain reason for unexpected reason.</li> <li>7. Do you have any suggestions s to ways we can improve planning for your discharge? If yes, please explain.</li> </ol> <p>*All patients were also asked if they had any questions for interviewer upon completion of the survey.</p>
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If a patient or caregiver answered yes to any of the following questions they were asked to elaborate:

1. Did you have to make any unexpected visits to the emergency department or your family physician?
2. Have you had any trouble caring for yourself?
3. Do you have any suggestions as to ways we can improve planning for your discharge?”

The patient was asked to describe symptoms, types of services received after discharge and timing of symptoms and physician /ER visits in relation to hospitalization.

**Results**

The following outlines the results of the survey, adverse events post-discharge and suggestions for improvement and recommendations for future follow up.

Summary:

- 90% of the patients stated they were doing well since being discharged.
- 87 % of the patients had no difficulty caring for themselves post-discharge.
- 96% of the patients found all discharge instructions were clear.
- 90% of the patients were satisfied with the amount of time they had to plan for discharge.
- 13% of the patients had suggestions for ways to improve discharge planning.
- 26.7% of the patients had to make an unexpected visit to either their family physician or to their regional emergency department.
- Of the 65 patients who received Community Health Referrals, 17% (n=11) were asked to attend a nursing clinic in their region-of this group, 45% (n=5) did not feel well enough to attend the clinic and stated they would have preferred a home visit.

**Summary of Adverse Events**

<b>Table 3: Types of Adverse Events After Discharge From Hospital</b>		
Wound Problems	7	9.9%
Readmission	1	3%
Symptom Management	10	14.1%
Medication	1	1.4%
Total	19	26.7%

*(Percentages are based on the total number of patients in the study n=71)*

Based on the study criteria, 19 of the 71 patients (26.7 %) experienced an adverse event following discharge. Of this group, 19.7% received an intervention, test or treatment. These results were similar to those reported by Forster et al (2004) in that there was a 23% incidence of reported adverse events post discharge from hospital. However, differences were noted in the type of adverse event in that Forster reported the most common event as adverse drug events (72%) and HCCSJ reported symptom management as the most common adverse event (53%). It should be noted that the HCCSJ study was on a much smaller scale and used different criteria than Forster.

Of the 71 patients, 13% (n=9) had suggestions for ways to improve discharge planning: 66% of these patients suggested providing more time for notice of discharge, 11% suggested a phone call after discharge, and one patient encouraged the organization to improve instructions specific to drainage tubes. Five patients would have preferred a home visit by the community health nurse instead of attending a nursing clinic

## **Recommendations**

The survey demonstrated important findings that have implications for improvement in discharge planning within the Health Care Corporation St. John's. A more formalized and standard process for follow up with patients after discharge from hospital would enhance care and enable better communication with external linkages such as Health and Community Services and home care agencies. Providing a standard process for follow up for all patients discharged from hospital on a daily basis would require both human and financial resources.

Second, a better integration of community-based services with hospital services is needed to provide a more seamless transition for the continuum of care. There are often gaps in the care between the transition from hospital to community. Interventions to improve this could include ongoing communication with community providers through education sessions, emails, liaison committees, and provision of contact names and phone numbers to provide for a seamless transition from hospital to community. Collaboration in the development of post discharge plans of care, care maps and pathways could improve patient outcomes. Improved collaboration with the Regional Health Boards will help to accomplish the goal of better integration of services between the hospital and the community.

Conducting this survey was a time consuming process for the Manager. It was necessary to review patient charts prior to interviewing the patient to ensure patient demographic data and medical information was available to carry out detailed and individualized discharge questions. Each interview took approximately 1 hour, including the data collection and review of chart. Several patients were not home at time of initial contact thereby necessitating follow up phone calls, which added to length of time to conduct the survey. It should also be recognized that the individual conducting the survey must demonstrate excellent communication skills, nursing knowledge, knowledge of community resources and linkages, and a good understanding of the discharge process.

## **Conclusion**

Reduction in length of stay is a cost effective outcome for hospitals but the effect of shortened stays on patient outcomes needs to be evaluated. Length of stay is often used as an indicator for efficiency within hospitals, with long length of stays viewed as inefficient (Brownell and Roos, 1995). Despite concerns from healthcare providers that patients being discharged “quicker and sicker” (Kosecoff et al., 1990), shorter length of stay has not been shown to increase adverse outcomes (Cleary et al., 1991).

This survey demonstrated that 90% of the patients surveyed were satisfied with the discharge planning process and 96% felt the discharge instructions were clear. This is a positive statement about the effectiveness of the discharge planning process. The survey provided an opportunity to act on individual suggestions from patients so that continuous improvements could be made to delivery of quality care. The study also reinforced the

need for giving patients more notice for discharge and this suggestion will be implemented through education of multidisciplinary team members. 19.7% of the patients experienced an adverse outcome that required medical intervention and although lower than the results of Forster et al., 2004, the responsibility of hospital discharge planners must include a follow-up component that moves beyond the hospital to the community (Simon and Showers, 1995).

A suggestion for further intervention would be the follow-up of all patients post-discharge with a phone call. The purpose of this would be to check on the status of the patient both physically and emotionally, as well as to ensure that planned services have been initiated. With the shift to a community perspective and the unpredictable changes that may occur once a patient returns to the community, there is a need to develop strategies and programs that ensure patients receive planned services (Simon & Showers, 1995). Telephone follow-up would also help identify patients who either require new services or require increased services. A formalized standard process for follow-up with patients/family post discharge to evaluate the effectiveness of the discharge strategies would be a key to ensuring continuity of care for patients

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