

## Discharge Communication and Patient Involvement are Associated with Unplanned Hospital Readmissions: Results from a Validated Hospital Experience Survey

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### Objectives

Unplanned hospital readmissions are an indicator of quality of care, and are associated with significant costs to healthcare systems. Previous research has shown that poor communication and discharge experiences are associated with higher readmission rates. This, however, has only been examined in the short-term, and in many instances, at the hospital-level. The purpose of the study was to examine the relationship between aspects of inpatient communication and discharge instructions and unplanned readmissions at the individual-level up to one-year post-discharge.

### Approach

The Hospital Consumer Assessment of Healthcare Providers and Systems (HCAHPS) telephone survey was completed by patients within 6 weeks of hospital discharge in Alberta, Canada. Survey data were linked to corresponding inpatient records using personal health number, discharge date, and facility codes. Unplanned readmissions (yes vs. no; all causes) from 43 to 365 days post-hospital discharge comprised the outcome variable. Independent variables included selected demographic characteristics, clinical variables, and five survey questions: a) patient involvement in their care decisions, b) receiving written information at discharge, c) understanding the purpose of taking medications, d) understanding responsibility for one's health, and e) discussing help needed when returning home. Multivariate logistic regression was used to examine each question in the presence of the other predictors. Odds ratios and 95% confidence intervals were calculated.

### Results

From April 2011 to March 2014, 24,868 patients completed a survey which was successfully linked to the corresponding inpa-

tient record. The cohort had a mean age of  $52.8 \pm 19.8$  years of age (range=18-100), and was predominantly female (65.4%). 18.6% of patients ( $n=4,620$ ) experienced an unplanned hospital readmission within 43 to 365 days post-discharge. Patients who felt that they were not involved in their care decisions were more likely to be readmitted (OR=1.79; 95%CI: 1.59-2.01), as were patients who did not receive written information at discharge (OR=1.96; 95%CI: 1.83-2.11). Odds of unplanned readmissions did not differ according to understanding of medications (OR=1.08; 95%CI: 0.90-1.30), understanding responsibility for one's health (OR=1.02; 95%CI: 0.86-1.20), or discussion of help needed when returning home (OR=1.03; 95%CI: 0.93-1.14).

### Conclusion

Our results demonstrate that a lack of patient involvement in their care and not receiving written information at discharge is associated with increased unplanned readmission rate up to one-year post-discharge. This present study provides an example of how patient-reported measures may be linked to individual-level administrative data to drive healthcare improvements. Future research examining patient-reported hospital experience and other health system measures is warranted.

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