

The Association of Timeliness of Discharge Summaries with Readmission Rates for patients admitted with Congestive Heart Failure.

IRB Protocol, Amanda Ramsdell

A. Study Purpose and Rationale

The public reporting of readmission data with corresponding new financial penalties have motivated many hospital administrations to develop and implement interventions targeting preventable re-admissions.ⁱ With limited financial resources, medical centers nationally are optimally striving to target the highest risk patients for readmission, who are most likely to benefit. Creating an accurate risk model to predict patients who are likely to be readmitted remains a challenge, with few effective risk stratifications currently being utilized, limiting the ability of many centers to identify patients who would benefit from discharge interventions.ⁱⁱ It has been proposed that the lack of accurate risk prediction models has prevented many hospital systems from successfully implementing such discharge interventions despite many of them having formal objectives of reducing preventable readmissions.ⁱⁱⁱ Despite many risk models created to predict readmission, many perform poorly and are not reproducible across medical systems.^{iv} Some have suggested that extrinsic factors related more to the hospital system than the characteristics of the patient may be better determinants.

Timing of discharge summary submission and dissemination has been associated in other hospital systems with clinical outcomes,^v as has timing of follow-up appointment post discharge.^{vi} A study of the highest performing medical centers in the country, with the lowest readmission rates cited the efforts of strengthening the relationship between community and inpatient providers as a high yield intervention.^{vii} The purpose of this study is to isolation the timeliness of discharge summary submission as having a possible association with readmission rates at 30 days.

B. Study Design and Statistical Analysis

Study Hypothesis: Submission of discharge summaries within one week of discharge is associated with decreased risk of readmission at thirty days for patients admitted within the internal medicine department with a primary diagnosis of congestive heart failure.

Our study design includes requesting the medical record numbers for any patients with admissions to the department of medicine to New York Presbyterian Hospital, Columbia campus from the dates January 1, 2011 to January 1, 2012 which are fewer than 30 days apart. In addition, data has been requested to extract date of birth, sex, zip code, marital status, insurance status and type, ICD-9 codes for each admission, length of stay, any clinical visit within the CUMC

system (including outpatient follow-ups or Emergency Room visits) from January 1, 2011 to February 1, 2012, and date of discharge summary submission for each admission. After MRNs and extractable data are obtained from data discovery, members of our team will perform chart reviews in order to assess additional elements which may be associated with higher risk of readmission. These factors include total **number of chronic medical conditions, planning and timing of follow-up appointments, presence of a primary care provider at CUMC or on record in patient chart, post-discharge or between admission site** (home with services?, nursing home?, subacute rehab?), and **primary language**. We will attempt to identify case controls according to factors mentioned above.

Nationally, readmission rates for congestive heart failure range from 18-25%, with most readmission studies considering a 10-15% decrease as significant. Given that NYP has 105,000 admissions per year, with approximately 25,000 readmissions, a theoretical decrease from 23% to 20.9% (as modeled from prior discharge summary study) would necessitate 4775 cases and 4775 controls. With the average inpatient admission costing \$12,000 in expenses, a decrease of about 10% would translate to a \$30,000,000 saving for NYP.

C. Study Procedure.

Study is retrospective and only involves chart review. No procedures apply to the patient.

D. Study Drugs

N/A

E. Medical Device

N/A

F. Study Questionnaires

N/A

G. Study Subjects

Inclusion Criteria: Patients must be admitted to the Internal Medicine department during the time period outlined above.

Exclusion Criteria: Patient admitted under private Attendings will not be included in the study.

H. Recruitment of Subjects

Cases and controls will be identified by requesting data from NYP, first identifying cases of readmission, then for matched case controls.

I. Confidentiality of Study Data

Due to the nature of some confounders for which we will need to match, chart review will be done, necessitating the request of MRN for particular readmissions.

J. Potential Conflict of Interest

No identified conflict of interest.

K. Location of the Study

The study will occur at CPMC.

L. Potential Risks

There is low/no risk to the study subjects as it only consists of retrospective chart review.

M. Potential Benefits

Little or no benefit to individual study subject exists, though long term benefits are possible for the hospital, with goal of reducing rate of hospital readmissions.

N. Alternative Therapies

N/A

O. Compensation to Subjects

There will be no compensation to the subjects

P. Costs to Subjects

Subjects will not incur any costs while involved in this study..

Q. Minors as Research Subjects

N/A

R. Radiation or Radioactive Substances

N/A

ⁱ Ann Intern Med. 2008;148(2):111-123.

ⁱⁱ JAMA. 2011;306(15):1688-1689.

ⁱⁱⁱ J Am Coll Cardiol. 2012;60:607-614.

^{iv} Kansagara D, Englander H, Salanitro A, Kagen D, Theobald C, Freeman M and Kripalani S. Risk Prediction Models for Hospital Readmission: A Systematic Review. VA-ESP Project #05-225; 2011.

^v *J Eval Clin Practice* (2011), 1365-2753.

^{vi} JAMA. 2010;303(17):1716-1722

^{vii} “Reducing Hospital Readmissions: Lessons from Top-performing Hospitals” Synthesis Report 2011 Commonwealth Fund pub. 1473, Vol 5