



Association between Post-discharge Follow-up and Readmission



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Research Question

- Is there an association between post-discharge follow-up with PCP and reduced hospital readmission rates within 30 and 90 days, with and without controlling for confounding factors?

Introduction & Study Design

Introduction

- An estimated 25% of hospital readmissions are preventable
- Reducing hospital readmissions is a major target of healthcare reform both institutionally and nationally
- Much of the research around hospital readmission examines specific subpopulations (i.e. Medicare recipients, CHF patients)

Methods/design

- Retrospective cohort study
- UCLA health patients admitted Jan 2016 – Dec 2019
- Exclusion criteria
 - <18 yo
 - Hospitalizations for elective surgery, labor and delivery, or psychiatry
 - Patients transferred to another inpatient facility or SNF
 - Deceased during hospitalization or discharged with hospice

Patient Characteristics

- n = 8,296
- See Table 1.

	Primary Care Visit Within 7 Days of Hospital Discharge							
	yes				no			
	n	%	ave	SD	n	%	ave	SD
Age, IQR	1,959		67.6	18.4	6337		72.4	16.6
ADI	1936		65.6	33.4	6250		70.3	32.2
LOS	1959		4.0	3.5	6337		4.7	5.2
PCP visit last 3 yr	1959		17.1	16.9	6337		10.4	13.3
Urgent care in last 3 years	1959		0.6	1.9	6337		0.4	1.3
ED visits last 12 mo	1959		4.0	4.5	6337		5.1	8.7
Admission last 6 mo	1959		1.7	1.3	6337		1.9	1.6
Count chronic conditions	1959		11.7	4.4	6337		11.3	4.8
Sex, female	1959	57.1%			6337	57.7%		
Patient Ethnicity								
Hispanic or Latino	1934	15.2%			6213	17.1%		
FirstRace								
Asian or Native American	1959	6.8%			6337	6.6%		
Black	1959	13.2%			6337	13.9%		
Unknown	1959	12.0%			6337	13.7%		
White or Caucasian	1959	66.9%			6337	64.3%		
Partner at residence	1951	43.7%			6296	42.6%		

Table 1. Patient Characteristics

Multivariate model readmission 30 days				
Readmission at 30 Days	Odds Ratio	95% CI		p-value
PCP Visit within 7 Days	0.65	0.57	0.74	<0.05
Patient Age	0.99	0.99	1	<0.05
Married	0.99	0.9	1.1	0.92
Asian	0.87	0.7	1.08	0.2
Race Other	1.03	0.89	1.2	0.7
Area Deprivation Index	1	1	1	0.83
Initial Length of Stay	1.01	1	1.02	<0.05
# of Urgent Care Visits in Prior 3 yrs	1.04	1.01	1.08	<0.05
ED Visits in Prior 12 mo	1.01	1.01	1.02	<0.05
Inpatient Admits in Prior 6 mo	1.23	1.18	1.28	<0.05
Count of Chronic Conditions	1.01	0.99	1.02	0.3

Table 2: Multivariate model

Results and Discussion

Rates of follow-up

- 24% (1,959) had a PCP visit within 7 days
- 32% (2,660) had a visit within 14 days

Association of early f/u and 30 day-rehospitalization

- Visit within 7 days UOR 0.60 (CI 0.53-0.68 <0.05 p-value)
- Visit within 14 days UOR 0.54 (CI 0.49-0.61 <0.05 p-value)
- UOR were similar and significant for 90 days readmission rates

Other variables associated with hospital readmission include

- Age (OR 0.99)
- Area Deprivation Index (OR 1.21)
- Length of Stay (OR 1.02)
- Count of Prior Urgent Care/ED Visits (1.05)
- Count of hospital admissions (OR 1.31)
- Number of chronic conditions (OR 1.03)

Multivariate Analysis

- See Table 2.

Discussion

- Early post-discharge follow-up was associated with lower readmission rates even when controlling for other patient characteristics
- Low rates of transitional care visits within study population suggest potential group to target intervention
- Encouraging transitional care visits for individuals most at risk of readmission according to existing risk prediction models could increase the effectiveness of potential interventions.
- Cannot determine causation given retrospective observational design
- Unable to assess from data whether or not follow-up appointment was scheduled for patient

Conclusions

- Absolute rates of PCP follow-up were low within the health system
- Post-discharge PCP visits within 7- and 14-days were associated with a lower likelihood of readmission within 30- or 90-days of discharge.