Needs Assessment of Improving Follow Up in Hospitalized Patients in a Primary Care Clinic

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INTRODUCTION

This project aims to assess the need for improving outpatient follow-up after hospitalization as studies have shown that timely outpatient follow up has been successful in reducing readmission rates[1-3]. Most studies evaluate the benefit of early outpatient follow up in patients with certain specific disease processes. The primary outcome of this project is to evaluate the number of patients who follow-up with their primary care physician (PCP). Secondary outcomes include: the number of patients who follow-up with another physician for their medical concern and the patients who do not follow-up within 2 weeks of their discharge date. The utility of this information can be informative for an intervention to increase the number of follow-up in patients who have been hospitalized with the use of telemedicine (text messages with appointment reminders, triaging certain medical concerns for telephone or email correspondence) or creating a role for a clinic nurse to make outpatient follow-up appointments for patients.

SETTING

This is a clinic with primary care physicians, and various specialty services, including cardiology, dietetics, gastroenterology and hepatology, neurology and pediatric, and podiatry. It also offers cardiology services (stress tests, cardiac echocardiograms, pacemaker/ICD evaluations), walk-in laboratory services, walk-in x-ray plain film services, and ultrasound services. In addition to Carmichael, patients are primarily from neighboring cities, including Citrus Heights, Fair Oaks, Orangevale, North Highlands, and Antelope.

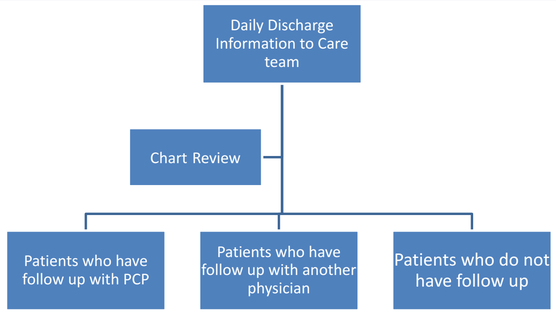
The PCN is structured to accept health plans from HMos and PPOs. Patients with Medicare/Medi-Cal are also accepted. Thus, the payer mix includes a portion of each of these type of healthcare plans.

The clinic hours are Monday - Friday 8am - 5pm and the clinic observes most national holidays and university holidays.

Staff that work at Carmichael PCN include physicians, nurses (RN, LVN), medical assistants, cardiology technicians, laboratory technicians and receptionists. Staff interaction with each patient begins at check-in with the reception staff. Medical assistants bring patients from the waiting room to the patient room where vitals and initial questioning is conducted. Once completed, the MA notifies the physician that the patient is ready to be seen. Upon completion of the patient-physician interview, the patient will either leave, go to radiology/lab for further studies or receive vaccinations from the MA. If an x-ray study is conducted, the patient is typically re-roomed and the results are discussed with the patient.

Per 2016 estimates, patient population is about 11,000 patients with about 2400 who have an HMO assignment to the UCD medical system.

METHODS



Daily Discharge Information to Care Team
Includes patient's MRN, age, name of PCP, dates admitted and discharged, description of visit, and admission type.

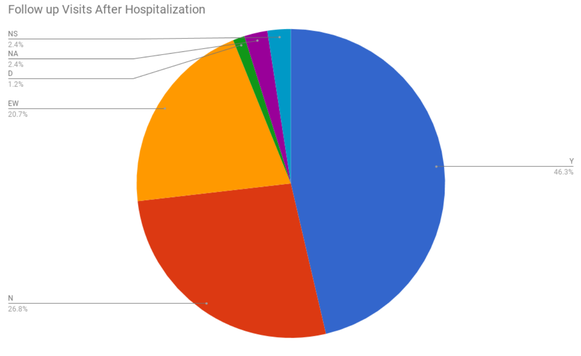
Chart Review
Review Patient's discharge summary, ED visit note, and chart review for subsequent encounters with their PCP or other providers.

Patients who have follow up with PCP
Patients who have follow up with PCP include a visit description "Hospital Visit Follow-Up" or a description of the visit matching the reason for hospitalization (i.e. discharge diagnoses). Visits are typically 2 weeks after the date of discharge. Future visits/appointments within 2 weeks of discharge with PCP were included as having follow-up. Telephone visits and email correspondence was not included.

Patients who have follow up with another physician
Included any office visit that included a visit description matching or similar to the reason for hospitalization

Patients who do not have follow up
No subsequent visits with any physicians/PCP within the two week period from discharge.

PRELIMINARY RESULTS



Patients (n=93) discharged from 12/31/2017 – 2/8/2018

Legend	N=93
Patients who have follow up with PCP (Y)	38 (46.3)
Patients who have follow up with another physician (EW)	17 (20.7%)
Patients who do not have follow up (N)	22 (26.8%)
Patients who did not show up to appointments with PCP (NS)	2 (2.4%)
Patients who were deceased (D)	1 (1.2%)
Patients charts were triaged in error(NA)	2 (2.4%)

ADDITIONAL RESEARCH QUESTIONS

1. How can providers and clinics better utilize methods of telemedicine? (Including and not limited to, telephone calls, video conferences, text message reminders, and email correspondence in the setting of hospital visit follow up.) What other resources would be required or interventions need to be implemented to foster better follow up via telemedicine?
2. Are there other sources of transitional care that patients could also benefit from? Resources like home health or hospice?
3. A study in Northwestern Memorial Hospital ED shows that follow-up outpatient appointments made at discharge increased follow-up compliance compared to patients who were given standard instructions for follow-up[4]. Would there be a significant difference in this type of intervention made at UC Davis ED?

SUMMARY AND CONCLUSIONS

1. A majority of patients (67%) had follow up with a physician after their hospitalization, with 46.3% of patients following up with their PCP and 20.7% of patients following up with another physician.
2. Nearly a quarter (26.8%) of patients did not follow up their physician after their inpatient hospitalization or ED visit.
3. This study could be strengthened with qualitative data to identify for barriers/factors influencing outpatient follow up.
4. Limitations of this study include sample size, length of time for observation, various modes of communication for follow up including e-mail correspondence and telephone exchange between provider and patients.

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