Recognizing the importance of outpatient follow-up after hospitalization, not only in management of chronic conditions, but also to decrease 30-day hospital readmissions.

"Timely outpatient follow-up has been promoted as a key strategy to reduce hospital readmissions, though one-half of patients readmitted within 30 days of hospital discharge do not have follow-up before the readmission." (1)

Shen et al. found there was 12% to 24% lower risk of 30-day hospital readmission if patients had follow-up within 7 days of discharge, compared to those patients who did not.

The goal of this study is to compare outpatient follow-up rates after hospital discharge across three family medicine resident clinics.

To see how many patients had a follow-up within 7 days from hospital discharge, and to see if that had lower odds of 30-day hospital readmission to those that did not have a follow-up within 7 days.

Data was collected from Epic via a SQL query for patients who were admitted to any Samaritan hospital between 2015 and 2019 with a hospital diagnosis of Heart Failure, MI, COPD Exacerbation, Pneumonia, or acute kidney/renal failure.

Only patients who had a primary care provider (PCP) at the time of their admission associated with Samaritan’s LCH, AGH, or GSR Family Medicine Resident Clinics were included.

Data was collected on outpatient office visits at these clinics within 7 days of discharge, and on 30-day readmission to any Samaritan hospital for any reason.

20,971 hospital admissions were identified between 2015 and 2019, with a hospital problem list diagnosis of one of the following: Heart Failure, MI, COPD Exacerbation, Pneumonia or Acute Kidney Injury / Renal Failure.

3,068 of those encounters involved patients with PCP from LCH, GSR, or AGH Resident Clinics

7-day follow-up rates varied by clinic (Table 1 & Figure 1).

- LCH family resident clinic had lowest follow-up rate (5%)
- GSR family resident clinic had the highest (24%)
- In all clinics, patients who had follow-up within 7 days had lower 30-day hospital readmission rates. (Table 1 & Figure 2)

The odds of 30-day hospital readmission were 40% lower for patients who follow-up at PCP’s clinic within 7 days of discharge (Odds Ratio = 0.60, 95% CI = 0.45-0.80, p<0.001)

Table 1. Hospital Encounters and follow-up, by clinic

<table>
<thead>
<tr>
<th>PCP Department</th>
<th># of hospital encounters</th>
<th>Follow-up rate of those with follow-up within 7 days</th>
<th>Readmission rate for those with follow-up within 7 days</th>
<th>Readmission rate for those without follow-up within 7 days</th>
</tr>
</thead>
<tbody>
<tr>
<td>LCH SAMARITAN FAMILY MEDICINE RESIDENT CLINIC</td>
<td>1161</td>
<td>9% (54)</td>
<td>21.44%</td>
<td>15% (975)</td>
</tr>
<tr>
<td>GSR SAMARITAN FAMILY MEDICINE RESIDENT CLINIC</td>
<td>712</td>
<td>24% (177)</td>
<td>10% (128)</td>
<td>15% (277)</td>
</tr>
<tr>
<td>AGH SAMARITAN FAMILY MEDICINE GEARY ST</td>
<td>1195</td>
<td>21% (245)</td>
<td>10% (211)</td>
<td>11% (273)</td>
</tr>
<tr>
<td>OVERALL</td>
<td>3644</td>
<td>11% (475)</td>
<td>19% (434)</td>
<td>12% (422)</td>
</tr>
</tbody>
</table>

Figure 1. % of hospital admissions with follow-up at patient PCP’s clinic within 7 days

Figure 2. Readmission Rates by 7-day Follow-up Status and by Clinic

There is a decrease rate of 30-day hospital readmission if patients follow-up with their outpatient primary care provider within 7 days of discharge from the hospital.

Follow-up rates within 7 days seem to be best at Corvallis Family Medicine Resident Clinic.

Chronic conditions were not taken into account during this study, and “although follow-up within 7 days was associated with substantially lower readmission rates… most patients do not appear to benefit from very early follow-up. Among patients with no or just 1 chronic or acute condition… readmissions were uncommon and negligibly affected by the timing of outpatient follow-up for up to 30 days.” (1)

DEVELOPING A SYSTEM WHICH PATIENTS ARE SEEN WITHIN ONE WEEK FOLLOWING DISCHARGE FROM HOSPITAL; WHETHER THAT BE IN THE CLINIC, TELEMEDICINE, OR A HOME VISIT.

Finding resources, as certain requirements have presented a barrier to widespread implementation of successful programs. (2)

Future quality improvement project ideas:

- Determine whether correct coding for ED visit vs hospital admission is being utilized
- Consider chronic conditions in timeline for follow-up

Compare treatment methods for those typical diagnoses across three Samaritan Hospitals: GSRMC, AGH, LCH

Home visits for frequent ED utilizers or telemedicine follow-ups following hospital discharge to identify determinants and barriers to health/recovery within the three communities.