Decreasing Hospital Readmissions with LACE-Driven Interventions

Richard Urgel, BSN, RN, CMSRN

BACKGROUND

- Hospital readmissions - significant problem for patients on Medicare and for those with significant co-occurring conditions or co-morbidities (Robinson & Hudali, 2017).
- Value-based purchasing - incentivizes hospitals to reduce readmissions by restricting reimbursement (CMS, 2012; CMS, 2018).
- Risk stratification scoring systems (e.g., LACE) - predict patients most likely to be readmitted (Robinson & Hudali, 2017).
- Success of combining interventions to prevent re-admissions – unknown.

PURPOSE

- Baseline data: March - May 2017, 90 pulmonary-renal unit patients who were discharged with a LACE score of ≥ 11 were readmitted. Of these, 68 (76%) were readmitted within 30 days.
- New project: to determine usefulness of additional interventions on readmission rates for discharged pulmonary-renal patients with LACE scores > 11.

ADDITIONAL INTERVENTIONS

- Folder containing discharge documents: patient teaching, requirements for physician follow-up, prescriptions, additional documents explaining course of treatment and results.
- Flyer: information about follow-up phone call within 48-hours from Call Center.
- Sticker with the Call Center’s phone number if needed.
- Call Center nurse refers patients to care as appropriate.

METHODS

Evidence-based quality improvement project.

Adult patients with:
- LACE score of 11 or greater
- medical diagnosis
- inpatient on pulmonary-renal unit at discharge
- discharge home with or without home health referral

Excluded: hospice, OB, psychiatric, surgical patients

All eligible patients discharged between March - May 2018 were included in the project and received the additional interventions.

RESULTS AND OUTCOMES

- 168 patients meeting project criteria discharge between March through May 2018.
- 100% received the discharge folder at discharge; 94% received the follow-up phone call.
- 14.3% of the 168 patients were readmitted within 30 days; 10% of patients who did not receive the phone call were readmitted.
- There was no significant difference in LACE scores of patients readmitted vs. those not readmitted.
- There was no significant correlation between LACE scores and days post discharge to readmission, \( r = -.05, p = .83 \)

ASSOCIATION BETWEEN READMISSIONS AND LACE SCORES

<table>
<thead>
<tr>
<th>Readmission within 30 days</th>
<th>Number (%)</th>
<th>LACE score Mean (SD) Range</th>
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<tbody>
<tr>
<td>NO</td>
<td>144 (85.7%)</td>
<td>12.90 (1.48)</td>
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<tr>
<td>YES</td>
<td>24 (14.3%)</td>
<td>13.42 (1.66)</td>
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\( t(166) = -1.567, p = .119 \)

IMPLICATIONS FOR PRACTICE

- When compared with 2017 data, the percentage of those who were readmitted within 30 days significantly changed; additional interventions may have contributed to this outcome.
- All patients with LACE scores > 10 should receive the interventions.

CONCLUSIONS / DISCUSSION

- Further exploration of how LACE scores are associated with readmissions may require knowing # of days post-discharge patients are readmitted.
- Further exploration into whether patients actually make it to the referrals given at hospital discharge.