POST ACUTE CARE INNOVATIONS
AHA 2017

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Unmatched National Reach
1. Telemedicine initiative to drive patient safety in the post acute space

2. Readmissions Innovation: Optimizing communication and collaboration between downstream providers in the post-acute space
Telemedicine Initiative
Telemedicine Initiative

Introduction

In 2015, two Cleveland Clinic-partnered Long Term Acute Care Hospitals (LTACHs) partnered with a nocturnal ICU telemedicine program to provide immediate on-demand access to an intensivist and critical care nurse practitioner during the hours of 1900-0700.
Telemedicine Initiative

Goals of the Program

• Immediate access to a critical-care certified provider
• Expedite the time between recognition and intervention
• Avoidance of inappropriate transfer back to short term acute care hospitals
Telemedicine Initiative Project Milestones

- Developed project proposal
- Identified steering committee
- Site assessment
- Review of metrics
- Review quality indicators
- Developed detailed scope
- Defined triggers, coverage model, and technical platform
- Developed business model and contract
- Created credentialing, documentation, and workflow processes
- Conducted project testing and go-live plan
- Developed technical implementation, maintenance, contingency, and oversight strategy
- Created plans for
  - Education
  - Orientation
  - Onboarding
- Ongoing post implementation quality monitoring and steering committee evaluation

2013

2016
## Telemedicine Initiative

Criteria for Consult

### Cardiovascular
- Code Blue
- SBP <80/MAP<55
- HR <40, >130
- Persistent chest pain
- New or worsening arrhythmia
- Vascular changes reflecting acute changes in perfusion

### Respiratory
- Sustained SaO2 <88%
- Increased work or breathing
- Significant changes in ventilator requirements

### Neurological
- Neurological changes consistent with CVA
- Acute psychiatric/behavioral changes

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Nurse or other clinician is concerned about the patient
Telemedicine Initiative
Patient Intervention

- SBAR handoff is provided by clinicians at the bedside
- Visualization and auscultation are accomplished via the InTouch Health Lite® robot
- ICU telemedicine providers maintain telehealth critical care privileges
Telemedicine Initiative
Quality Monitoring

• Post-event survey
  – Completed by the LTACH and telemedicine staff
  – Captures disposition, technical/connection issues, feedback about interprofessional collaboration
  – Results automatically sent to LTACH and telemedicine leadership
Telemedicine Initiative
Reported Reason for Call

Top Reasons (4Q2015-1Q2017)
- Respiratory Distress
- Changes in Vital Signs
- Change in Mental Status
- Code Blue
- Other (< 5% each)
Telemedicine Initiative
Patients Who Remained in the LTACH Following a Consult

Over 50% improvement in LTACH patient retention since the start of telemedicine

% of Patients who Remained

p-chart

UCL

CL

LCL

4Q2015 1Q2016 2Q2016 3Q2016 4Q2016
Telemedicine Initiative

Key Outcomes

• Both LTACHs have noted a favorable reduction in unplanned discharge to short term acute care since the program’s inception

• Over 90% of clinicians report satisfaction with the connection established via the robot

• Immediate access to feedback facilitates a rapid-cycle improvement strategy
Readmissions Innovation
Prompting Timely Information Transfer:
Primary Care Access Alone Not Decreasing Readmissions

Lower Risk of Readmission
When PCP Receives Discharge Summary

Factors Associated with Non-Elective Readmission Within Three Months of Discharge
n=888

<table>
<thead>
<tr>
<th>Factor</th>
<th>Relative Hazard of Readmission¹</th>
</tr>
</thead>
<tbody>
<tr>
<td>Patient has regular family physician</td>
<td>2.26</td>
</tr>
<tr>
<td>Patient had &gt;1 physician assessments before admission</td>
<td>1.01</td>
</tr>
<tr>
<td>Discharge summary received by one or more follow-up physicians</td>
<td>0.74</td>
</tr>
</tbody>
</table>

Study in Brief

- Researchers followed patients discharged from 700-bed AMC to measure readmission rates three months following discharge
- Measured a variety of factors, including percentage of time discharge summary was received by follow-up physician prior to first visit post-discharge
- Readmission risk increased if patients had a regular family physician, higher health service utilization; risk decreased if patients were seen by a physician who received discharge summary

Kripalani et al. JAMA 2007
Van Walraven et al. JGIM 2007
Readmissions Innovation
Discharges Home Just Part of the Puzzle

PAC Settings Not Receiving Critical Information

Sources of Readmissions

- Home, No Post-Acute Care: 64%
- Discharged with Home Health: 20%
- SNF: 11%
- Rehab/Psychiatric Hospitals, LTC: 5%

Percentage of SNFs Receiving Necessary Information about Patients

- Almost Always: 45.5%
- Some of the Time: 35.1%
- Infrequently: 11.8%
- Never: 7.6%

n=466

Source: Advisory Board. Preventing Unnecessary Readmissions. 2010.
Readmissions Innovation
LTACH 30-day Readmission

• CMS compare website now contains public display of risk-standardized 30-day readmission rates for LTCHs
• Readmission data analyzed from CY2013-2014 claims
• Readmission was not computed for different cohorts of LTCH patients
• Transfers and discharges to STACH are not included
• The average confidence interval for LTCHs better or worse than the national rate is 1.5%
Readmissions Innovation
Intervention to Prevent 30-day Readmission

• Three month pilot study in 3 LTCHs in Tallahassee, Toledo and Savannah
• Direct provider to provider communication from LTCH NPs to NP, PA, or Physician at receiving SNFs
• Follow up communication on day 7 and day 30
Readmissions Innovation
Intervention to Prevent 30-day Readmission

• Provider communication items with emphasis on major issues:
  – Demographic and primary Dx
  – Key problems
  – Neurological mental status / events
  – Cardiovascular issues (e.g., arrhythmia)
  – Respiratory summary (e.g., weaned, trach, O₂ status)
  – GI / Nutrition status
  – Infections
  – Skin / Wound issues
  – Social / Behavioral concerns
  – Pending labs
  – Medication review
Readmissions Innovation
Intervention to Prevent 30-day Readmission

- Facilitating communication and data collection via email and internet (Survey Gizmo)
- Follow-up communication – day 7 and day 30
  - STACH readmission or ED visits (with reasons)
  - Current patient status / condition
  - Discharge disposition (actual / anticipated)
  - Progress with plan of care – discussion
Readmissions Innovation
Intervention to Prevent 30-day Readmission

• Readmission prevention challenges
  – When to discharge from LTCH
  – Receptiveness of downstream provider organization
  – Timely connection with appropriate provider
  – Receptive discussion of treatment and care plan
  – Evaluation of outcomes associated with intervention
Thanks!