A Quality Improvement Initiative to Reduce Hospital 30-day Heart Failure Readmission Rates by Implementing a Nurse Practitioner Led Multi-Disciplinary Transitional Care Clinic

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POUORSE
- Implement a nurse practitioner led multi-disciplinary transitional care (NP-MTOC) heart failure (HF) clinic
- Ensure timely follow up
- Develop a standardized discharge process
- Reduce 30-day hospital HF readmission rates

BACKGROUND

Population
- Currently, there are an estimated 5.7 million people in the U.S. diagnosed with heart failure (HF) (1)
- ~300,000 deaths attributed to HF per year (2)

Cost
- Every year an estimated $30.7 billion is spent on the treatment of heart failure (2)
- National estimates demonstrate that hospital readmission cost is projected to be nearly $24 billion annually in Medicare expenditures (3)

Hospital Readmission Reduction Program
- The Centers for Medicare and Medicaid Services (CMS) started to track 30-day readmission rates with the Hospital Readmission Reduction Program of the Affordable Care Act (4)

Setting
- Private not-for-profit 1,007 bed hospital supporting new paradigms for transitional care
- Average 30-day readmission rate 02/2018-08/2018 19.8%

METHODS

Design:
- Patients identified by ICD code
- NP-MTOC Hours of Operation
- Every Friday 10am-2pm
- NP-MTOC Inclusion criteria:
  - Opt in/out program
  - >18 years
  - No PCP/Cardiology appt within seven to ten days scheduled
  - EF <40%
- NP-MTOC Exclusion criteria:
  - Positive urinie drug screen
  - End stage renal disease on dialysis
  - Cirrhosis
- Data collection time frame: 2/19-08/19

Sample size:
- 36 patients
- 61 total scheduled visits
- 6 total no-show visits
- 55 actual visits
- 39 of 55 visits were post-discharge initial appointments
- 1 patient was readmitted >30 days and seen again for initial post-discharge appointment
- 1 patient was readmitted on day 29 and seen again for initial post-discharge appointment
- 16 of 39 visits were deemed high risk for readmission and were seen a second time for follow up

RESULTS

<table>
<thead>
<tr>
<th>Gender</th>
<th>Total % of Patients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Male</td>
<td>63.8%</td>
</tr>
<tr>
<td>Female</td>
<td>36.1%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Age</th>
<th>Total % of Patients</th>
</tr>
</thead>
<tbody>
<tr>
<td>18-34</td>
<td>8.3%</td>
</tr>
<tr>
<td>35-54</td>
<td>27.7%</td>
</tr>
<tr>
<td>55-64</td>
<td>38.8%</td>
</tr>
<tr>
<td>65+</td>
<td>25%</td>
</tr>
</tbody>
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HF 30-Day Hospital Readmission Data 02/2018-08/2018
- 19.8%
- 80.2%
- 55%

HF NP-MT0C 30-Day Hospital Readmission Data 2/2019-8/2019
- 8%
- 92%
- 30 Day Readmission (n=3)

DISCUSSION

- In 7 months of operation and over 23 clinic days, the HF NP-MTOC readmission rate was 8% (n=3)
- 2 of the 3 readmitted patients were unfunded
- 41% of the patients seen in clinic required a second appointment as they were deemed high risk for readmission based on the APRN recommendations
- 0% 30-day Mortality
- 64% required a referral to a cardiologist
- One out of the three readmitted patients received a heart transplant
- HF coordinator was reassigned during project
- No cross-coverage for NP when NP was off
- Four closed clinic days
- Variable staffing given QI initiative was volunteer based

Limitations
- Small sample size
- Inpatient staff knowledge deficit of clinic operation
- The clinic began seeing HF with preserved ejection fraction (HFpEF) patients in June 2019, limiting availability for HFpEF patients. In 6 months the clinic had three days of only HFpEF patients

Recommendations
- Expansion of the clinic days and time offered
- PDSA process for efficient patient identification
- PDSA process to ensure staff knowledge of clinic
- HF guidelines for follow up and patient enrollment into HF transition clinic
- Further research on the unfunded patient population
- Cost-benefit analysis of clinic expansion

REFERENCES


University of South Florida College of Nursing

Tampa, Florida