Improving Access to Heart Failure Care: Pilot Study of a Nurse Practitioner (NP) Managed-Post Hospital Discharged Transition Clinic

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Background

- Heart failure (HF) is the leading cause of hospital admission and readmission
- HF accounts for the highest 30-day readmission rate in Canada
- Post discharge transition period is a high risk phase
- There is an increased risk of death within 30 days post discharge
- Historical readmission rate at St. Boniface Hospital for HF was approx 16%
- CCS benchmarks recommend follow up within 2 weeks post discharge
- Literature suggests follow-up post discharge varies
- Challenges persist in ensuring efficient and consistent transition from the acute care setting to the community.
- Readmission is costly
- Reduces patients’ and care giver’s quality of life

Goals of the Pilot Project

- To achieve the recommended CCS benchmark for follow-up utilizing a NP-run clinic
- To demonstrate reduction in 30 day readmission
- To track quality indicators for HF care

Method

- Six month pilot from November 2014 to May 2015
- All HF patients from Cardiology in-patient unit were referred to the NP clinic and seen within 2 weeks post discharge
- One on one visit with NP and subsequent follow-up to optimize treatment
- Individualized teaching (teach back method)
- Tracking of quality indicators
- Triaging for later appointment with HF specialist
- Communicating patient status at every visit with community care providers
- Referral to cardiac rehabilitation

Results N = 42

<table>
<thead>
<tr>
<th>Gender</th>
<th>Male</th>
<th>Female</th>
</tr>
</thead>
<tbody>
<tr>
<td>Age</td>
<td>Mean</td>
<td>67 +/- 12.3</td>
</tr>
<tr>
<td>Etiology</td>
<td>Ischemic</td>
<td>55%</td>
</tr>
<tr>
<td></td>
<td>Non-Ischemic</td>
<td>45%</td>
</tr>
<tr>
<td>LV EF documented</td>
<td>Pre</td>
<td>Post</td>
</tr>
<tr>
<td>Use of Ace-I / Alternatives</td>
<td>100%</td>
<td>95%</td>
</tr>
<tr>
<td>Use of Beta Blocker</td>
<td>90%</td>
<td>93%</td>
</tr>
<tr>
<td>Minnesota Living with HF</td>
<td>Mean 56.5</td>
<td>Mean 56.5 (p&lt;0.0001)</td>
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<tr>
<td>NYHA (improvement by at least 1 class)</td>
<td>Mean of 15.3</td>
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<tr>
<td>30 Day readmission - all-cause HF</td>
<td>9.5%</td>
<td>5%</td>
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<tr>
<td>30 Day mortality</td>
<td>0%</td>
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Discussion

- NP-run clinic met the goals of the project
  - Achieved CCS benchmark
  - Reduced readmission
  - Tracked quality indicators
  - Assessed gaps in discharge planning
  - Assessed adherence to medications and optimization of guideline-based therapy
  - Provided clear, timely, and organized information to patients and families promoting self-care
  - Provided opportunities to discuss advance care planning and end of life care as necessary

Conclusion

- NP-run clinic demonstrated a reduction in HF readmissions as compared to historical rates
- It is an innovative HF care strategy in the transition phase of ambulatory care
- Future studies are needed to determine if this model of early access to HF care and education results in improved patient outcomes and cost savings driven by a reduction in HF readmissions

Disclosure

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