Heart Failure Transitional Care: An Inter-professional Approach

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Objectives
At the completion of this presentation, the participants will:
1. Analyze current state of transitional care of heart failure patients from hospitalization to next level of care.
2. Discuss third party payers and quality organizations impact in delivery of evidence based care.
3. Examine the impact of inter-professional teamwork in optimizing patient centered positive outcomes.

Holds 107,282
Epidemiology of HF

- 550,000 diagnosed for the first time each year
- Current 5 million Americans living with HF
- 10 per 1000 people over the age of 65
- 12-15 million office visits
- 6.5 million hospital days
- Rate of hospitalizations up 159% over the last decade.
- Cost $27.9 billion direct and indirect costs
- $2.9 billion annually on drugs for treatment
- 1.5-2% of the US population
- Prevalence increases 6-10% in patients aged above 65 years.

Current State Analysis

Examine the population of admissions for HF (more adeptly, discharges with HF)

- Age
- Gender
- Economic status
- Health literacy
- Type of HF: (Systolic – HFREF or Diastolic- HFpEF)
- Admission source: ED, Clinic, Direct, Transfer
- Type of hospital: Urban, rural, academic, community etc..

Patient Characteristics: 2012

<table>
<thead>
<tr>
<th>Race/Ethnicity</th>
<th>African America</th>
<th>Other</th>
<th>White/Caucasian</th>
<th>English-Primary Language</th>
<th>Age</th>
<th>Other</th>
</tr>
</thead>
<tbody>
<tr>
<td>HF Patients</td>
<td>n=449</td>
<td></td>
<td>n=464</td>
<td>Median age: 70 yrs</td>
<td></td>
<td>62% admit from ED</td>
</tr>
<tr>
<td>HF Patient Percentage</td>
<td>4.7%</td>
<td>0.3%</td>
<td>95%</td>
<td>98%</td>
<td>M: 55%</td>
<td>P: 45%</td>
</tr>
<tr>
<td>Organizational Percentage</td>
<td>9.3%</td>
<td>5%</td>
<td>89.7%</td>
<td>97.1%</td>
<td>M: 47.4%</td>
<td>P: 52.6%</td>
</tr>
</tbody>
</table>
Care Variability Analysis
Jul12- Mar 13

<table>
<thead>
<tr>
<th>Race</th>
<th>All Discharges</th>
<th>HF Patients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Caucasian</td>
<td>94%</td>
<td>97%</td>
</tr>
<tr>
<td>African-American</td>
<td>5%</td>
<td>2%</td>
</tr>
<tr>
<td>Other</td>
<td>1%</td>
<td>0%</td>
</tr>
<tr>
<td>Asian</td>
<td>1%</td>
<td>0%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Ethnicity</th>
<th>All Discharges</th>
<th>HF Patients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Not Hispanic</td>
<td>97%</td>
<td>97%</td>
</tr>
<tr>
<td>Hispanic</td>
<td>3%</td>
<td>3%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Language</th>
<th>All Discharges</th>
<th>HF Patients</th>
</tr>
</thead>
<tbody>
<tr>
<td>English</td>
<td>99%</td>
<td>99%</td>
</tr>
<tr>
<td>Spanish</td>
<td>1%</td>
<td>&lt;1%</td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Literacy</th>
<th>All Discharges</th>
<th>HF Patients</th>
</tr>
</thead>
<tbody>
<tr>
<td>Barriers to Learning</td>
<td>20%</td>
<td>25%</td>
</tr>
<tr>
<td>No barriers</td>
<td>80%</td>
<td>75%</td>
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</tbody>
</table>

An adult admission education assessment is required and evaluates:
- barriers to learning (cultural barriers, language barrier, literacy)
- preferences for learning (verbal explanation, written documents, interpreter)

HF Program Demographics
Jul – Nov 12

<table>
<thead>
<tr>
<th>HF Admission Source</th>
<th>26%</th>
<th>43%</th>
</tr>
</thead>
<tbody>
<tr>
<td>EDI</td>
<td>14%</td>
<td></td>
</tr>
<tr>
<td>Cardiology</td>
<td>1%</td>
<td></td>
</tr>
<tr>
<td>GYN</td>
<td>1%</td>
<td></td>
</tr>
<tr>
<td>Other Units</td>
<td>3%</td>
<td></td>
</tr>
</tbody>
</table>

<table>
<thead>
<tr>
<th>Index Discharge Unit</th>
<th>32%</th>
<th>51%</th>
</tr>
</thead>
<tbody>
<tr>
<td>HVI/Cards</td>
<td>14%</td>
<td></td>
</tr>
<tr>
<td>2nd Floor</td>
<td>1%</td>
<td></td>
</tr>
<tr>
<td>3rd Floor</td>
<td>4%</td>
<td></td>
</tr>
<tr>
<td>4th Floor</td>
<td>6%</td>
<td></td>
</tr>
<tr>
<td>5th Floor</td>
<td>5%</td>
<td></td>
</tr>
<tr>
<td>Other</td>
<td>1%</td>
<td></td>
</tr>
</tbody>
</table>

Index Discharge Disposition

- Expired
- Home
- Other Facility
- Hospice
- Home, Hospice

Defining Transitional Care

- Actions of healthcare providers designed to ensure the coordination and continuity of health care during the movement, called care transition, between health care practitioners and settings as their condition and care needs change during the course of a chronic or acute illness.

Application of an APN HF Transitional Model

Key Points:

1. Identification of HF patients through screening:
   a. Electronic triggers: Pro-NT BNP parameters, PMH, admission diagnosis
   b. Care Coordination: ED notification

New Admission Heart Failure Alerts
APN Transitional HF Program

Advance Practice Nurse Heart Failure Transitional Care

Target Population: Inpatient Adults admitted with HF.

- HF and acute Cardiology patients and by consult
- High Risk patients: multiple co-morbidities readmissions within 6 months, newly diagnosed

HF Advance Practice Nurse Transitional Care Team

- One-on-one didactic education and counseling on HF self care management
- Chart review and recommendations for service team on evidence-based practice
- Appropriate referrals to palliative care, financial services, social services and other as appropriate

Ancillary Staff

- Dietitian consult
- PT/OT consult
- Care Coordination
  - VNA referrals
  - Long and short term care
- Pharmacist

- “See you in 7” day follow up clinic appointment with APN, PCP, or MD
- Telephonic Management up to 6 weeks or longer

Maximizing Limited Resources to Reducing Readmission Rates in a Heart Failure Transitional Model

Penny Mislin, MD, CCM, with the Penn State Milton S. Hershey Medical Center

Order Sets
PY13: Discharge Screening for High Risk Heart Failure Patient Identification

Implemented evidenced-based CORE tool: http://www.readmissionscore.org/heart_failure_result.php

Completed by HF APN
• Score > 20: If not referred to HF Transitional Care Program then...
  • Care Coordination consulted to engage Home Health or VNA HF Program (HH)

<table>
<thead>
<tr>
<th></th>
<th>Jan-Mar12</th>
<th>Oct-Dec12</th>
<th>Jul-Sep12</th>
</tr>
</thead>
<tbody>
<tr>
<td>% Home Discharges Referred to HH</td>
<td>16%</td>
<td>33%</td>
<td>26%</td>
</tr>
</tbody>
</table>

Referrals ↑ 63% PY13

Post Discharge Environment

• Prediction Models
  • Rely on hospitalized data
  • Miss key domains
    ◆ Emotional barriers: subclinical depression
    ◆ Cognitive limitations
    ◆ Health literacy: level of education, types of learning style.
    ◆ Social support: caregiver stress, financial stressors

Complete all sections

Form

Transitioning to next level of care

- Warm hand offs
- VNA orders
- SNF
- Rehab
- Bundled care
The Village!

Monthly Work Group

Provider Focused Education

Provider Updates:
- Medicine Grand Rounds
- Outpatient Clinician Update
- Advance Practice Clinicians
- Critical Care Updates
- Breakfast/ Lunch and Learn
- Heart Failure Self Learning Pack
- Mentoring: Graduate and undergrad
HF Transitional Care Program: Patient Satisfaction Survey

- Understanding of HF (good/very good)
- Education Provided (helpful/very helpful)
- Confident in Self Management (confident/ very confident)
- Recommend Program (yes)

HF Transitional Care Patient Satisfaction Survey Results
(Reported Quarterly)

Jan-Mar 2013: Improvement in all categories of responses

PY13: HF Readmissions LOS

- HF Patient LOS
- Readmission LOS by Service

PY 13: HF Readmission Trends

PSHMC PY13: HF Readmissions
- Percentage of All HF Readmits: 8.30%
- Percentage of All Readmitted Pts by 3, 7, 30 Day Categories: 3.70%, 2.90%, 4.30%
PY13: HF 30 Day Readmission

PSHMC HF Readmissions

- Rate
- Benchmark

Benchmark Source: CMS National HF Readmissions Data
2010 Benchmark: 24.7%
2011 Benchmark: 20.0%

PY12 - PY13: ↓ 11.5

Quality + Guidelines = Success

PENN STATE HERSHEY
Milford S. Hershey Medical Center
Nursing