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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PURPOSE

- 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

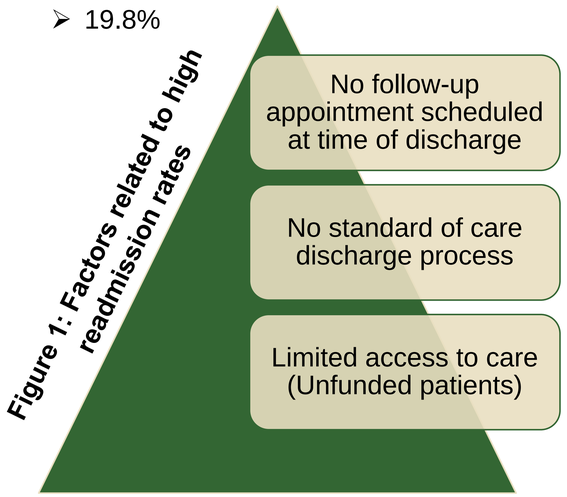
- Every year an estimated $30.7 billion is spent on the treatment of heart failure (2)
- National estimates demonstrate that hospital readmission cost is projected to be nearly $24 billion annually in Medicare expenditures (3)

Hospital Readmission Reduction Program

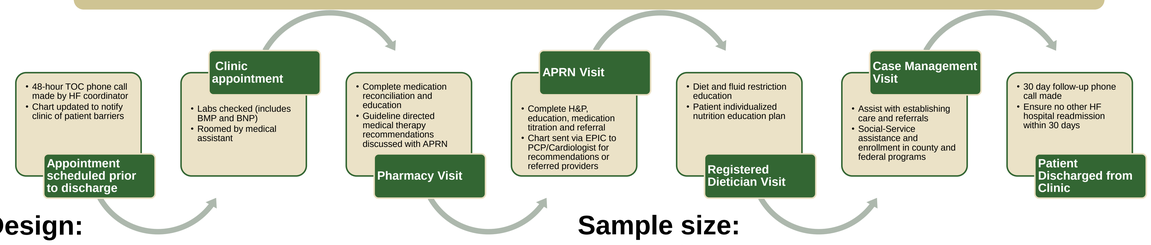
- The Centers for Medicare and Medicaid Services (CMS) started to track 30-day readmission rates with the Hospital Readmission Reduction Program of the Affordable Care Act (4)

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:

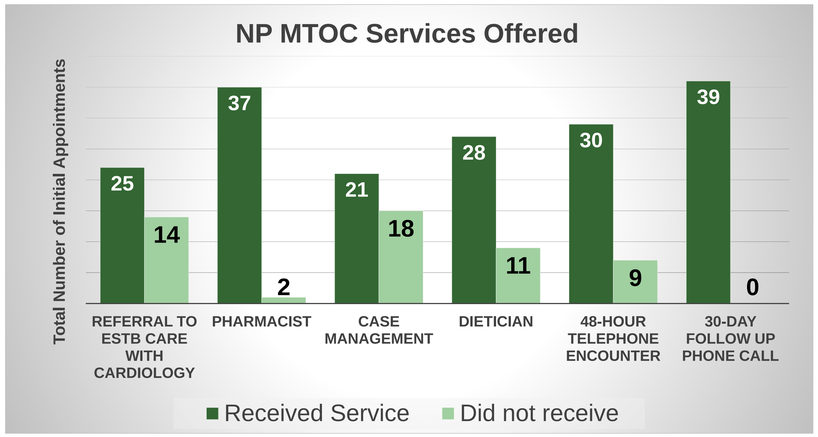
- Patients identified by ICD code
- NP-MTOC Hours of Operation
  - Every Friday 10am-2pm
- NP-MTOC Inclusion criteria:
  - Opt in/out program
  - >18 years
  - No PCP/Cardiology appt within seven to ten days scheduled
  - EF <40%
- NP-MTOC Exclusion criteria:
  - Positive urine drug screen
  - End stage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

Sample size:

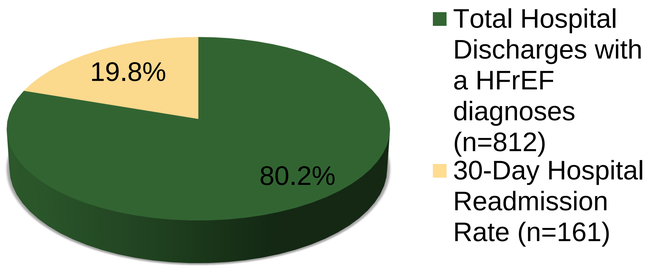
- 36 patients
- 61 total scheduled visits
  - 6 total no-show visits
  - 55 actual visits
    - 39 of 55 visits were post-discharge initial appointments
    - 1 patient was readmitted >30 days and seen again for initial post-discharge appointment
    - 1 patient was readmitted on day 29 and seen for initial post-discharge appointment and then readmitted >30 days 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

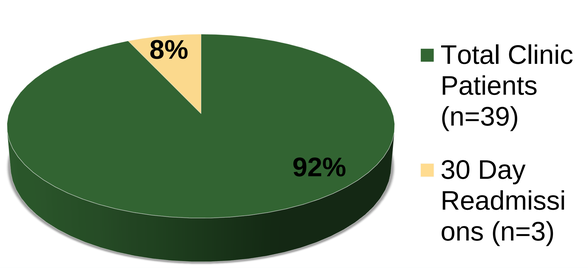
Gender	Total % of Patients
Male	63.8%
Female	36.1%
Age	**Total % of Patients**
18-34	8.3%
35-54	27.7%
55-64	38.8%
65+	25%



HF 30-Day Hospital Readmission Data 02/2018-08/2018



HF NP-MTOC 30-Day Readmission Data 2/2019-8/2019



DISCUSSION

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 HFrEF 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

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