Contact Information
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Physician Organization Name: Spectrum Health Medical Group
Practice Name: Advanced Heart Failure Clinic
Practice Address: 2902 Bradford, Grand Rapids, Mi
How many physicians in practice: 7 Cardiologists
Description of care team (number of care team members and their degrees/qualifications, at the time of the best practice activity): Physician Assistants-2, Nurse Practitioners-3, MSW-1, Pharmacist-1, RNs-2, Medical Assistants-5, RN Care Manager-1, Practice Manager-1

Executive Summary (5-8 bullet points, must include summary of results)

- The Advanced Heart Failure Clinic identified a need for additional patient support due to an increase in patient volume to the clinic coupled with organizational goals of decreased readmissions and cost of care.
- A lack of care coordination between PCP, hospital and specialty was identified.
- While some care coordination was being done in the clinic by other staff, it was creating challenges for those members to stay within the scope of their role and compete their regularly assigned duties.
- The decision was made to embed a full time RN Care Manager (CM) into the Advanced Heart Failure Clinic.
- In the first year, the RN CM conducted 1,826 visits with patients. He provided care coordination and supported the Heart Failure Clinic interventions with these patients.
- Analyzing a cohort of 25 patients, results of this work demonstrate a 43% reduction in ED utilization and a 48% reduction in Inpatient Admissions.

Category of Submission (see page 1): Reduction of Utilization

Title of Submission: Embedded RN Care Manager in the Advanced Heart Failure Clinic

When did the intervention start and end? (1-2 sentences)
The RN CM began his work in the clinic 4/1/2018. We measured the outcomes of his interventions on a cohort of 25 patients from 5/7/2018 to 5/10/2019.

Goal of the Program/Intervention: (1-2 sentences)
The goals of embedding the RN CM into the Advanced Heart Failure Clinic point to triple aim: decrease inpatient readmissions in the heart failure patient population, decrease the cost of care and increase patient and provider satisfaction by increasing communication and coordination across the continuum of care. We used a team-based approach to accomplish these goals by including the patient, inpatient teams, ambulatory care teams, the Advanced Heart Failure Clinic providers and community partners.

Who developed the program/intervention, and how? (2-4 sentences)
Embedment of the RNCM into the Advanced Heart Failure Clinic was developed by the Heart Failure Clinic leadership, Care Management Director, the RN CM and his supervisor. The Care Management department was able to bring their experience embedding RN CMs into Primary Care Physicians offices over the prior 6 years. While the Heart Failure Clinic was able to apply these concepts to the specific needs of their patient population and setting.

Description of the Program/Intervention (2-3 paragraphs):
The RN CM coordinated care for patients discharging from the hospital to a Sub-Acute Rehab, Assisted Living or home with home health care. He coordinated Palliative care and Advanced Care Planning in the Clinic. He participated in real time Heart Failure readmissions phone conferences designed to identify root cause of the

readmission and coordinating appropriate approaches and interventions. The RN CM worked closely with the Inpatient Heart Failure nurse navigator and ambulatory care Nurses in the PCP practices to provide smooth transitions.

The RN CM also provided direction for PCP/ambulatory CMs to identify patients meeting criteria for referral to the Advanced Heart Failure Clinic and facilitated bidirectional communication between them.

How were patients identified for the program/intervention? (1-2 paragraphs)
In the Clinic, the RN CM identified patients who would benefit from his services by reviewing the list of CardioMEMs patients for implantation and patients receiving Milrinone/Lasix infusion in the clinic or home. The providers identified patients for warm handovers to the RN CM they felt would benefit from CM services. In addition, the RNCM saw patients who had a change in their HF classification indicating continued disease trajectory requiring a change in approach and interventions.

As indicated above, patients were also identified if they had been readmitted and soon to be discharged. The RN CM facilitated H2O (hospital to office) follow up visits to the Advanced Heart Failure Clinic in a timely manner. He assisted with coordination and follow up for patients going home with multiple services.

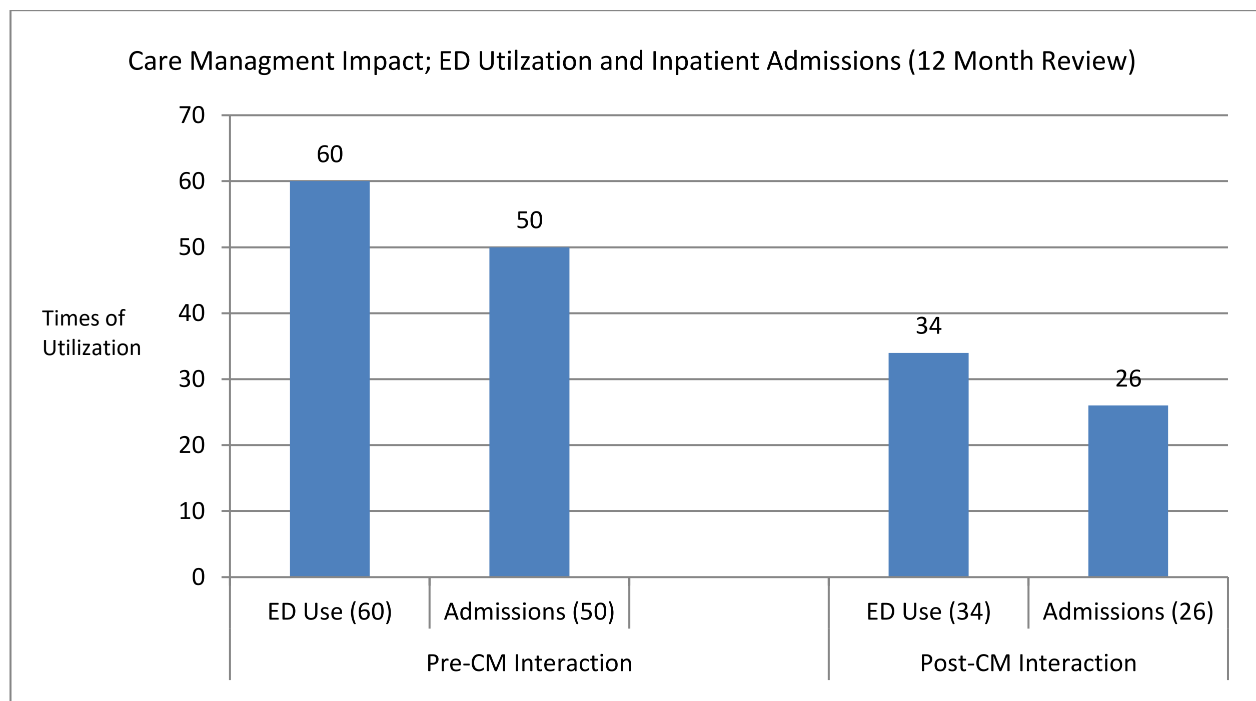
How was success measured? Please delineate whether metrics were process-based or outcome-based (2-3 paragraphs)

Interactions between both CM and the interdisciplinary team improved patient engagement, decrease gaps in care, improved timeliness of interventions or clinical follow up for patient treatment.

We measured this work with the outcome-based metrics of decreased ED and inpatient utilization.

What were the program results? Include qualitative data/graphs (2-3 paragraphs)

- The graph below represents a cohort of 25 patients, demonstrating a 43% reduction in ED Utilization and a 48% reduction in Inpatient Admissions.



Success story;
73yo female, history Cardiomyopathy and Heart Failure.
Pre-CM engagement.
Patient was seen weekly in the clinic for nursing staff to fill medication tray for the week. Each visit utilized 1.5 hours of nursing time and the patient still demonstrated poor medication compliance. No patient engagement in goals of care or assisting in filling medication tray. The patient was admitted to the hospital four times in one year time for exacerbation of symptoms.
Post CM engagement.
CM assisted patient conversion to Blister Pack meds for self-administration and tracking in home with improved engagement. Patient clinic visits decreased to 1/month for normal, routine management of disease. Significantly improved compliance to taking medications timely. No utilized RN time/week, <30 minutes of engagement per month. Patient now has CardioMEMS implant to monitor HF; placement approval was a direct result in change to medication compliance and patient engagement. Admission to hospital one time in last ten months.

Were any new tools, processes, or resources developed to aid in the implementation of the program/intervention? (1-2 paragraphs)
Patient identification was based on the principals of the evidenced based Care Management Process. i.e. Patients out of scope, Patients with multiple comorbidities, Patients with SDOH impacts.

The 3-day cardiology discharge report was a new tool that was developed. This report identifies patients discharged from Spectrum Hospitals with cardiac diagnoses, those referred to the heart failure clinic and those with heart failure clinic providers. This enables to RNCM to make sure the patient has an H2O (Hospital to Office) follow up office visit. The report also identifies the discharge disposition (i.e. to home with home care or to a skilled nursing facility) so that the RNCM can coordinate care with these care partners and contact the patient to facilitate their transition. Process improvement for this report will include pulling in discharges from other facilities.

What are you proudest of regarding this submission? Why does this work matter? (1-2 paragraphs)

Embedding the RM CM into the team has resulted in earlier identification of patient care goals and needs, earlier inclusion of supplemental services, improved transition of care planning, interdisciplinary team approach to the care of the complex, high risk patient and increased discussions in the care of patient discharged from the hospital to other care facilities or services. Engagement of the patient in their own care, understanding of their diagnosis and need for continued follow up and cooperation with their care providers also improved. The RN CM has been excited to see patients reengage in treatment and empowered to self-manage. One patient said even though they realize they will always have the heart failure diagnosis they “feel like they got their life back.”

How will your organization use the funds if your submission wins? (1 paragraph)
We would like to use funds for self-management devices patients cannot afford such as blood pressure cuffs, scales etc.