ISSN: 2634 - 6796

Journal of Cardiology Research Reviews & Reports

SCIENTIFIC Research and Community

Research Article

Open Access

Impact of Heart Failure Focused Follow-Up Care at the "Heart Success Clinic" on 30-Day Readmission Rates in Patients with Congestive Heart Failure

Deepti Bhandare*, Sabita Bellur and Rabia Iqbal

Department of Cardiology, Advent Health Sebring, Sebring, Florida, USA

Abstract

Nearly 6.2 million people in the United states are affected by heart failure, it is predicted that this number will rise to 8.5 million by 2030 Significant effort has been made to prevent heart failure and its exacerbations. The Hospital Readmission Reduction Program (HRRP), a Medicaare based program, was established to link payment to quality of care. Payment is reduced to hospitals when patients are readmitted within 30 days for heart failure The "Heart Success Clinic" is an out-patient clinic started to improve patient outcomes and reduce readmission rates. Patients are provided with heart failure focused visits which includes detailed medication reviews, diet modification, weight loss, disease education, etc. During the six months prior to the opening of the clinic, the readmission rate was 15.27% at AdventHealth Sebring hospital which is a community-based hospital. Data was collected on the patients who attended the "Heart Success Clinic" for six months. Zero patients from the clinic were readmitted, bringing the readmission rate down from 15.27% to 0%. This pilot study gives promising initial results. Further studies can be conducted over a longer period time as to gather more patients. Overall, the study demonstrates that there is value in providing heart failure focused follow up visits in improving patient outcomes and readmission rates.

Corresponding author: Deepti Bhandare, Cardiology, Advent Health Sebring, Sebring, Florida, USA. E-mail: deeptibhandare81@gmail.com.

Received: March 03, 2020 **Accepted**: March 12, 2020 , **Published:** March 15, 2020

Keywords: Heart Failure, Heart Success Clinic, Congestive Heart Failure

Background

Heart Failure is the inability of the heart's functionality to meet the body's needs. Regardless of the pathogenesis, the heart's ability to perform its function effectively is compromised. These various forms of heart failure have collectively contributed to the rising prevalence of the disease.

Risk factors for heart failure are advanced age, chronic hypertension, family history, coronary artery disease, obesity, and diabetes among others.

Considering the numerous pathogenesis and risk factors, heart failure has become a leading medical and public health concern. It is associated with significant mortality and necessitates close medical attention. Nearly 6.2 million people in

the United States are affected by heart failure, it is predicted that this number will rise to 8.5 million by 2030 [1]. Due to the rising prevalence, a significant amount of money is used in the diagnosis and treatment for heart failure. The Center for Disease Control and Prevention states nearly 30.7 billion dollars are spent each year on health care services provided for heart failure [2].

Despite aggressive pharmaceutical interventions and lifestyle modifications, heart failure has proven to have a poor prognosis and requires frequent hospitalizations. Of the patients discharged from the hospital due to heart failure, 20% are readmitted within 30 days and 50% are readmitted within 6 months [3].

The economic burden for heart failure is only further affected by the rising readmission rates. The Hospital Readmissions Reduction Program (HRRP) was developed to link payment to quality of care. This Medicare based program reduces payment to hospitals that readmit patients with heart failure within 30 days [4].

Our study focuses on the impact of a newly opened "Heart Success Clinic" at AdventHealth Sebring on heart failure readmission rates within 30 days.

The Heart Success Clinic is a program offered to patients that were seen and discharged from Advent Health Sebring due to systolic and diastolic heart failure. With each appointment, overall progress is evaluated. Patients are provided education of their disease, medication compliance, and lifestyle modifications. The goal of this study is to demonstrate a statistically significant improvement in the 30-day readmission rates in patients hospitalized for active exacerbation of heart failure after receiving focused patient follow-up and education.

Methods

This is a retrospective study, a data review on inpatient heart failure admits who are seen in the hospital and in the Heart Success Clinic. Qualifying patients were chosen from the database collected by the Quality Assurance Department at Advent Health Sebring hospital and Advent Health Cardiology Associates which is the outpatient cardiology clinic to be tracked for readmissions. The readmissions were noted at 30 days. This study compares changes in heart failure readmission 6 months prior to the opening of the Heart Success Clinic and 6 months after the opening of the clinic. The goal is to assess if there is a decline in heart failure readmission rates since the opening of the Heart Success Clinic.

Transition of care is important to encourage patient education and assess patient compliance. Similarly, at the Heart Success Clinic, initial appointments were focused on patient's medical history as well as thoroughly educating patients on heart failure and living with the disease. Cardiologists, medical students, and a nurse practitioner work together to provide care focused on preventing heart failure exacerbations. Appointments are approximately one hour long and led by a nurse practitioner. These appointments are a supplement to their regular cardiology visits. Every patient has an initial appointment after discharge and follow up visits are scheduled based on the patient's progress. Medications are reviewed during every visit with appropriate changes made. Education on heart healthy diets (low sodium, low fat, etc.) is provided and modified based on any comorbidities (diabetes mellitus, chronic kidney disease, etc.). Patients are reminded to measure their weight, follow appropriate fluid restrictions, and take their blood pressure on a regular basis.

In addition to heart failure focused appointments, patients are also provided with 24/7 telemedicine support. The goal of telemedicine support is to give patients an alternative option when unsure whether they should go to the ER.

Results

Initial data was gathered over the six months prior to the opening of the clinic. 203 patients with the primary diagnosis of heart failure were admitted to Advent Health Sebring. Of those 203 patients, 31 were readmitted within 30 days for heart failure resulting in a readmission rate of 15.27%. The average number of days between hospital admissions was 14.

Twenty-eight patients were seen at the Heart Success Clinic over the span of six months after the initial data was collected. Four of those patients had not been discharged from the hospital and were not included in the study. None of the remaining 24 patients were readmitted within 30 days to the hospital for heart failure resulting in a 0% readmission rate.

Heart failure 30-day readmission rates were significantly reduced from 15.27% to 0% when patients were provided with focused care at the Heart Success Clinic after discharge. The age of the patients was between 65-85 years. The number of males was 15 and females was 9.

Discussion

The Hospital Readmissions Reduction Program (HRRP) was established in 2012 to improve quality of care by linking it to payment. As a Medicare-based program, it reduces payment to hospitals with excess readmissions. This includes patients who have been readmitted within 30 days for acute myocardial infarction, chronic obstructive pulmonary disease, heart failure, pneumonia, after coronary artery bypass graft (CABG) surgery, and after elective primary total hip arthroplasty or total knee arthroplasty. [4,5]. It is in the hospital's best interest financially to reduce readmissions. The program has been met with negative and positive criticism. Before the program, hospitals had no financial incentive to prevent readmissions. However, skeptics believe hospitals and/or physicians may be reluctant to readmit patients due to penalties. The Heart Success Clinic was developed to tackle this dilemma. Focused heart failure visits are intended to improve quality of care with the added goal of preventing hospital readmissions.

This pilot study demonstrates that there is value in focused follow up care after being discharged for heart failure. Transition of care at hospitals can be variable. Patients during discharge may not be in the mindset to fully absorb the information provided. Heart failure focused outpatient follow up visits enable enough time for medical professionals to assess the patient's progress and compliance. It also gives patients the opportunity to ask questions they may not have had time for previously.

The 24/7 telemedicine service offers an intermediary between staying at home when outside of business hours and going to the ER. The objective of this service is to reduce any unnecessary visits to the ER, which can be a significant financial burden to the patient.

Focused follow up visits help medical professionals manage comorbidities and risk factors in order to reduce heart failure exacerbations. Depending on the patient's needs, time can be spent on smoking cessation, weight loss, diet modification, etc. Although these may be addressed during a primary care visit, patients have a chance to understand how these factors affect their heart failure specifically. All these components plus detailed medication review facilitates continuity of care and reduction of errors.

This study is a respectable initial look at how focused follow up care can benefit both the patient and medical institution. The research overall is straightforward to reproduce. After establishing a program, data collection can be easily collected. The main flaw of the study is the small sample size of Heart Success Clinic patients. It would be beneficial to revisit the data after a longer period. Therefore, this data can be regarded as preliminary with initial promising results for the future. Another flaw is that the Heart Success Clinic patients are self-selecting, thus the sample is not truly random. Patients have a choice in whether they would like to attend these visits, which could imply that they are more compliant overall.

The design of this study need not be restricted to heart failure. It can be expanded to medical conditions such as COPD, pneumonia, acute myocardial infarction, etc.

Conclusion

Heart failure focused follow up visits can help reduce 30-day readmissions to hospitals by 15.27%. Due to new HRRP penalties, this can be a significant cost reduction to the hospital. More importantly, it improves quality of care to the patient by giving them more opportunities to review their progress. The patient's care is managed holistically by addressing medications, diet, exercise, and stress among other things.

References

1. Heidenreich PA, Albert NM, Allen LA, Bluemke DA, Butler J, et al. (2013) Forecasting the Impact of Heart Failure in the United States. Circulation: Heart Failure 6: 606-619.
2. Heart Failure Fact Sheet |Data & Statistics |DHDSP|CDC Retrieved from https://www.cdc.gov/dhdsp/data_statistics/fact_sheets/fs_heart_failure.htm.
3. O'Connor CM (2017) High Heart Failure Readmission Rates. Retrieved from http://heartfailure.onlinejacc.org/content/5/5/393.
4. Readmissions-Reduction-Program (2019) Retrieved from https://www.cms.gov/Medicare/Medicare-Fee-for-Service-Payment/AcuteInpatientPPS/Readmissions-Reduction-Program
5. Mcilvennan CK, Eapen ZJ, Allen LA (2015) Hospital Readmissions Reduction Program. Circulation 131: 1796-1803.