Establishing the first pharmacist-led heart failure medication optimization clinic in the middle east gulf region

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Topic(s):
Chronic Heart Failure: Multidisciplinary Interventions

Citation:
Introduction: Heart failure (HF) 30-day readmission rate exceeds 21% and is the highest among any chronic disease state. Medication errors and indiscretions have been found to be prevalent post discharge. It has also been reported that only 1% of eligible HF patients are on target doses of all evidence based medications. Innovative strategies to reduce HF readmissions and improve utilization of guideline-directed medical therapies (GDMT) are needed. We seek to describe a per protocol weekly HF Pharmacotherapy optimization clinic established at our institution in February 2017 as part of a collaborative practice agreement and its impact on HF patients. Methods: Selected HF patients could be referred from the inpatient or outpatient setting by the HF physician. A clinic visit consists of a nursing encounter for volume status assessment followed by a cardiology pharmacotherapy specialist to assess self-care and adherence and to perform medication titration or adjustment. Patients could be scheduled for further pharmacotherapy clinics or referred back to the HF physician at the discretion of the pharmacotherapy specialist. Follow-up period was defined as the time between the first visit and up to 30 days after last pharmacotherapy visit. All assessments, education and interventions were documented using a standard HF pharmacotherapy optimization clinic template. Results: A total of 63 patients and 133 visits were completed between February 2017 and June 2018 for a mean follow-up period of 55.9 ± 42.7 days with about half of them (52.4%) seen for only one visit. Most patients were referred from the outpatient setting (65.1%), had HF reduced ejection fraction (HFrEF) (84.1%) with New York heart association (NYHA) class II symptoms (72.6%), and were admitted with heart failure within the last 3 months (55.6%). The most common reason for referral was medication titration (57.1%) followed by transition of care and medication titration (35%). At the first visit, many patients had inadequate weight monitoring (63.3%) and most (75.4%) had at least one deficiency in either self-care or adherence to salt, fluid, weight, symptom recognition or medications. A total of 219 interventions were documented for an average of 3.5 interventions per patient and the vast majority (96.8%) had at least one intervention. The most common intervention was teaching and correction of an inadequacy (46 patients) followed by renin angiotensin aldosterone system (RAAS) medication titration (48 titrations). More patients were at target doses of GDMT at the last visit (figure 1). A total of 6 patients (9.5%) had a HF related admission during follow-up period, 5 patients (7.9%) within 30 days of first visit, and 12 patients (19%) within 6 months of first visit. Conclusion: Pharmacist-led heart failure clinic establishment corrects noncompliance and optimizes medication therapy. More data regarding cost is necessary to quantify the value and impact of these clinics.
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Figure 1: Percentage of patients on target doses of GDMT (n=63)