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Background

- Heart Failure (HF) is one of the most common causes of hospitalizations with the national average for HF readmissions being almost 22%.^{1,2}
- Project RED (Re-Engineered Discharge), founded at Boston University Medical Center, is a program that uses twelve components to improve the discharge process and reduce readmission rates.
 - Component 5 - educating the patients on their medications and the side effects.
 - Component 12 – conducting a follow-up phone call within 72 hours of discharge to reinforce education and problem solve.
- It was found that unplanned hospitalizations were significantly reduced in patients who received a pharmacist follow-up phone call versus those that did not receive any pharmacy contact (17.7% vs 29.9% respectively).³
- Many studies support having a pharmacist as part of the multi-disciplinary team to help reduce readmissions.

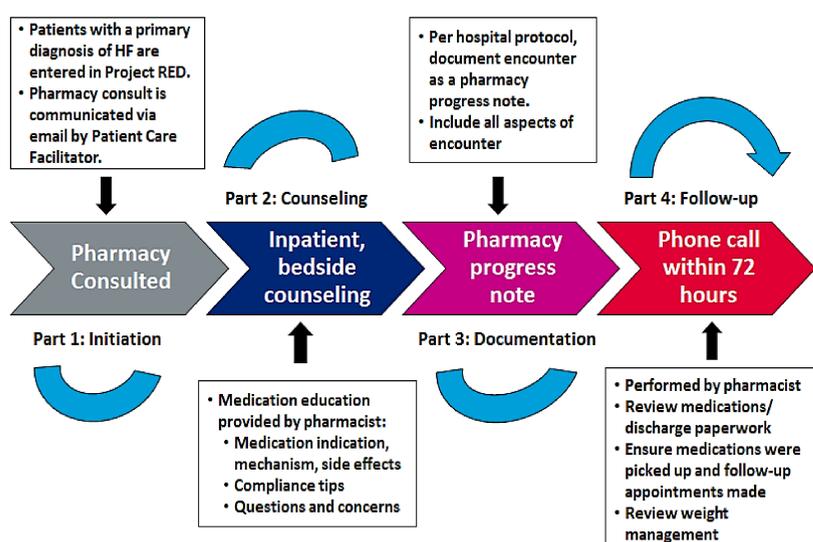
Aim

To demonstrate that pharmacist involvement in Project RED impacts the readmission rates for patients with Heart Failure.

Multi-disciplinary Team

- Physician** – educates patient about tests, procedures; determines when patient is ready to be discharged
- Case Manager/Social Worker** – meets with family; assesses ability to go home; homecare needs
- Patient Care Facilitator** – Identifies target HF population and enrolls in Project RED; educates patient about HF and self-care.
- Dietitian** – educates patient on low sodium diet
- Pharmacist** – educates patient on medications, side effects, and compliance during hospital admission; performs follow-up phone call within 72 hours
- Nurse** – education support, reviews discharge papers

Pharmacist Workflow



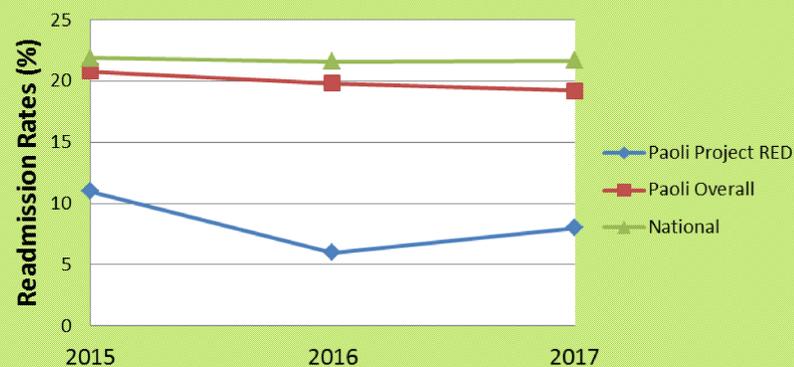
Methods

- Patients are enrolled in Project RED if they have a primary diagnosis of HF and are being discharged home.
- A retrospective review was conducted of the data collected over a three year period: (2015-2017)
 - Percent of patients seen during hospitalization
 - Average length of time spent on inpatient, bedside counseling
 - Percent of patients who were contacted during follow-up
 - Average time spent on each telephone call
 - Readmission rate for patients enrolled in Project RED

Results

Year	Patients enrolled in Project RED	Seen Inpatient	Average time of counseling (minutes)	Follow-up Phone Call Contact	Average Time on Phone (minutes)
2015	98	77%	24	62%	10
2016	152	66%	24.7	76%	9
2017	178	58%	20.1	58%	7.4

30-Day HF Readmission Rates



* Paoli Overall and National readmission rates based on Hospital Compare data

Lessons Learned

Barriers

- Limited pharmacist hours - Monday through Friday, day shift
- Last minute consults due to change in discharge plan
- Patients not interested in phone call
- Non-compliant patients
- Three attempts to call with no contact

Opportunities

- Pharmacy Resident involvement allowed three pharmacists to be involved
- Building relationships
- Catching discrepancies in doses, duplicate therapies, drug interactions.
- Able to assist with other areas of concern

Summary

- Paoli Hospital has been able to steadily prevent and/or reduce HF readmissions.
- Overall, the 30-day readmission rate is consistently lower than the national average (19.2% versus 21.7% for 2017).
- Between 2015 and 2017, the 30-day readmission rate for Project RED was ≤ 11%.
- Pharmacy collaboration, through early patient engagement and telephone follow-up monitoring, along with Patient Care Facilitator education, delivery of nursing care, nutrition counseling and Care Coordination assessments demonstrate that Project RED is effective in preventing and/or reducing HF readmissions.

References

- Kilgore M, Patel HK, Kielhorn A, et al. Economic burden of hospitalizations of Medicare beneficiaries with heart failure. Risk Manag Healthc Policy. 2017; 10:63-70.
- Hospital Compare. Washington, D.C.: United States, Dept of Health & Human Services. Accessed September 2018 at: <https://www.medicare.gov/hospitalcompare/search.html>
- Sanchez GM, Douglass MA, Mancuso MA. Revisiting Project Re-Engineered Discharge (RED): the impact of a pharmacist telephone intervention on hospital readmission rates. Pharmacotherapy. 2015; 35(9): 805-812.