

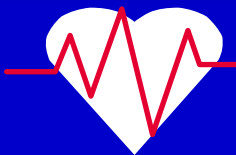
Impact of a Group Heart Failure Clinic on Patient Outcomes in a Veteran Population

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Lexington VAMC Heart Failure Clinic

- Established in November 2005
- A collaboration between Pharmacy, Nursing, Nutrition, and Primary Care
- Group Clinic Format
 - Shared Medical Appointment
- Referral from Primary Care and Cardiology



Group Clinic Consult

Template: PHARMACY GROUP CHRONIC HEART FAILURE CONSULT

CHF Group Clinic is a multidisciplinary clinic designed to provide heart failure education for primary care patients in a group setting. Patients will also be given the option to have individual follow-up with the clinical pharmacist for medication adjustment.

ELGIBILITY REQUIREMENTS:

1. Patient must be enrolled with a primary care provider.
2. Patient must be capable/willing to participate in a group visit.
3. Patient must be willing to keep a record of daily weight.

PLEASE EXCLUDE PATIENTS WHO HAVE DIFFICULTY HEARING OR OTHER COMMUNICATION BARRIERS.

Reason for consult (check all that apply):

CHF Education

Medication titration/adjustment by clinical pharmacist

Other:

Have medications that have been shown to be harmful to patient's with CHF been discontinued (e.g. NSAIDs, metformin, thiazolidinediones)?

* Yes No

Comments:

Follow-up needed: 1 month 2 months 3 months Other



Group Heart Failure Clinic

- Patient asked to attend 4 sessions (1/month)
 - Heart Failure Overview
 - Medications
 - Lifestyle Modifications
 - Diet and Nutrition
- Group Appointment
 - ~1.5 hours
 - 5-8 patients per session along with family members



Group Clinic Visit

**Introduction and
Educational Topic
Discussion
(15-20 minutes)**

**RN/ARNP
(20 minutes)**

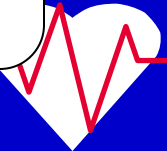
**Discuss pertinent HF
issues with patient;
physical assessment;
order labs**

**Pharmacist
(30 minutes)**

**Titrate medications to
HF guidelines and make
recommendations to
PCP**

**Dietician
(30 minutes)**

**HF specific dietary
precautions along with
Q & A**



Evaluation of Clinic Outcomes

- Primary Objective:
 - Evaluate the impact of a multidisciplinary group HF clinic on quality of life (Kansas City Cardiomyopathy Questionnaire)
- Secondary Objectives:
 - Medication Optimization
 - Heart failure related utilization of hospital resources (ED and PC visits)



Retrospective Chart Review

Number of Patients	n=44
Mean Age	67 years
Race	Caucasian - 84% / African American - 16%
Gender	Male - 100%
Average number of medications at baseline	6.6 meds/patient
Average EF at baseline	34%
Average BNP at baseline	358 pg/ml



Results – Quality of Life

Kansas City Cardiomyopathy Questionnaire: Result Summary Table

Domain	Baseline to 2 nd clinic visit (p value) n=44	Baseline to 3 rd clinic visit (p value) n=37	Baseline to 4 th clinic visit (p value) n=32	Baseline to 5 th clinic visit (p value) n=12
Quality of Life	0.563	0.265	0.144	0.0117
Physical Limitation	0.053	0.008	0.006	0.420
Overall Summary Score	0.076	0.004	0.003	0.002



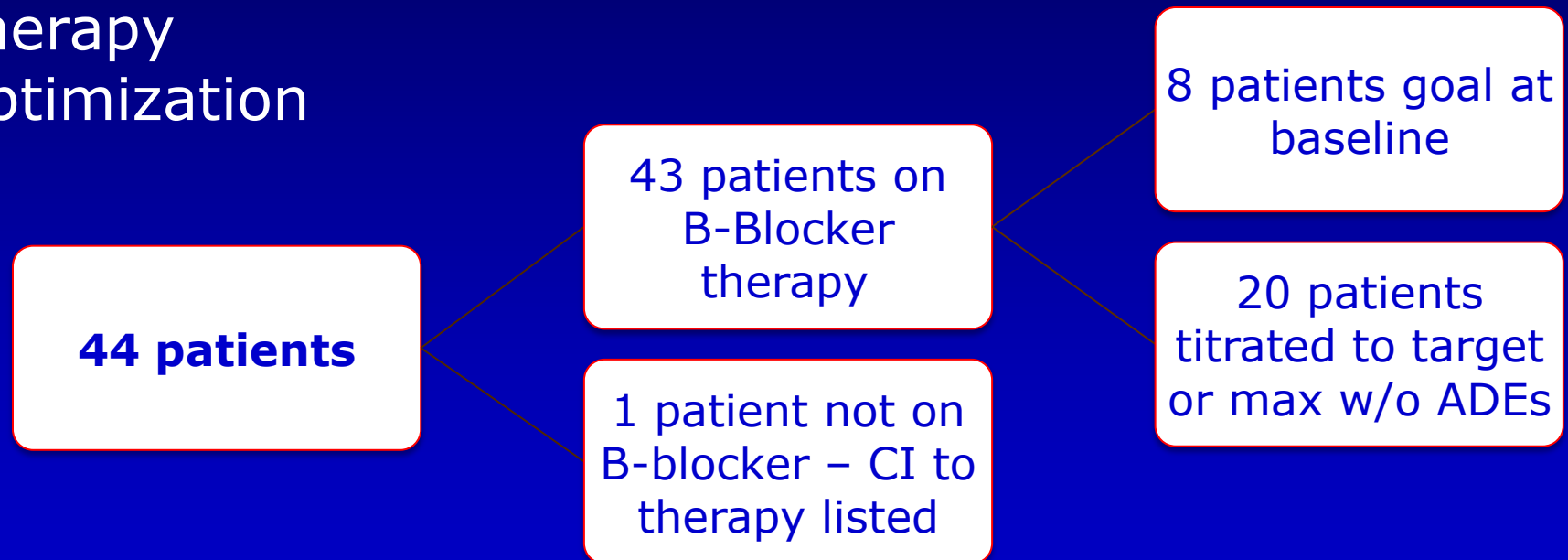
Results - Medication Optimization

ACE inhibitor/ARB Therapy Optimization



Results - Medication Optimization

Beta Blocker Therapy Optimization



Results - Medication Optimization

- **ACEI / ARB therapy**
 - 34% of patients at goal at baseline
 - 82% at goal after (or titrated to max effect without ADEs)
 - $p < 0.001$
- **Beta blocker therapy**
 - 19% of patients at goal at baseline
 - 65% at goal after (or titrated to max effect without ADEs)
 - $p < 0.001$



Results- PC and ED visits

- **Statistically significant decrease in combined HF related PCP and ED visits (p - 0.001)**
- Compared # of visits in 365 days prior to initial HF group visit vs. # of visits in 365 days following first group clinic visit



Lessons Learned

- Resources and Support (up front)
 - Group clinic room with space for wheelchairs
 - Clinic Facilitator (scheduling, room preparation, educational packets.....)
 - Group Clinic Documenter (enters notes in CPRS during clinic)
 - Staff Coverage
- Identify patients appropriate for group clinic appointments

