A Novel Method to Reduce Heart Failure Readmissions

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Objectives

Pharmacist Objectives:
- Explain the basics of the Heart Failure Exacerbation Rescue Kit
- Discuss workflow for administering a Rescue Kit from admission to discharge in a hospital system
- Describe the cost-benefit analysis of a Heart Failure Exacerbation Rescue Kit

Technician Objectives:
- Explain the preparation of the Heart Failure Exacerbation Rescue Kit

THE BASICS

HEART FAILURE EXACERBATION KIT

THE BASICS

Objectives

- Reduce hospital readmission by early recognition and treatment of heart failure symptoms
- Dispense to all Heart Failure patients under the care of SWG Home Health Care unless contraindicated

Medications

- Loop Diuretic:
  - Torsemide 20 mg # 10
- Thiazide Related Diuretic:
  - Metolazone 5 mg # 2
- Electrolyte Supplement(s):
  - Potassium Chloride 20 mEq # 6
  - Magnesium L-lactate # 6
Kit Basics

- "Dear Physician" Letter
- How to order the Rescue Kit
- Visual materials
  - Poster board
  - Mock kit
- Inform PCP

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**Vital to the success of the Kit!**

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**Objectives**

**Medications**

- **For MDs**
- **For RNs**
- **For Pts**

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**Kit Basics**

- Patient must be HF SWG HHC
- Discharge counseling required
  - Address four main questions
    - WHEN to use it?
    - WHAT is it for?
    - WHAT is in it?
    - HOW much does it cost?

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**Warning Labels on Kit**

- Do not open unless instructed by your Home Health Nurse or Physician
- Do not use past
- Not for daily use
- Yellow Zone use only

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**Heart Failure Exacerbation Kit**

**Workflow**

**Goal Zone**
- Symptom free
  - Hoax or worsening:
    - Shortness of breath
    - Swelling of feet, ankles, legs or stomach
    - Chest pain
    - Stable weight (within 4 pounds of dry weight)

**Caution Zone**
- CALL your Home Health Care Nurse if you:
  - Gain more than 2 pounds in 1 day or 5 pounds in 1 week
  - From your dry weight
  - Have shortness of breath when laying down or still
  - Have swelling of the feet, legs, ankles, or stomach

**Yellow Zone**
- Home Health Care: 440-818-6850

**Emergencies**
- Go to the emergency room or call 911 if you:
  - Have shortness of breath while still
  - Are struggling to breathe
  - Have new or worsening chest pain
  - Have confusion or cannot think clearly
HHC Liaison is alerted of SWG HHC patient

HHC Liaison contacts HF team to evaluate patient for appropriateness of Kit

Kit Rx's are printed and signed by MD then faxed to SWG Community Pharmacy and filled by technicians

Once Kit is ready, it is brought to patient's floor where Discharge RPh or HF team member will counsel patient

Patient is discharge with SWG HHC and HF Kit and closely monitored by HHC RN for yellow zone symptoms

Workflow

- After hours?
- Weekends?

Workflow

- HF Exacerbation:
  - Unrelieved shortness of breath
  - Worsening edema
    - Swelling in the legs, ankles, or abdomen
  - Weight gain of 2 pounds in one day or 5 pounds in one week

YELLOW ZONE CRITERIA ➔ ACTIVATE THE HF RESCUE KIT

Workflow

- Exacerbation Day 1
  - Loop Diuretic: Torsemide
    - If the patient is taking torsemide as a routine home med, the regular dose is doubled in the morning
    - If the patient is taking furosemide as a routine home med:
      - Furosemide morning dose is replaced with the same mg dose of torsemide in the morning
      - The patient’s normal evening dose of furosemide is still taken if applicable
    - Max torsemide dose is 200 mg PO daily

Workflow

- Exacerbation Day 2 IF NOT RETURNED TO BASELINE
  - Loop Diuretic: Torsemide
    - Repeat torsemide using exacerbation day 1 dose
  - Thiazide Related Diuretic: Metolazone
    - Add metolazone 5 mg 30 minutes prior to torsemide
  - Electrolyte supplements: KCl, Mg
    - Administered if potassium levels < 3.5 mEq/L or magnesium levels are < 1.7 mEq/L
    - Max KCl is 60 mEq per dose
Workflow

- **Exacerbation Day 3**
  - If weight not back to baseline or weight increased, refer to emergency department for review of systems

### Cost Benefit

**HEART FAILURE EXACERBATION KIT**

- **COST BENEFIT**

#### Cost of Heart Failure Readmission
- **Considerations:**
  - Average LOS: 5.8 days
  - Average Cost/Day: $1200-$2000
  - Average Medicare Readmittance: 27% in 30 days

#### Cost of Heart Failure Kit
- **Supplies:** ~$2/kit
  - Labels
  - Bags
  - Bottles
  - Tamper Tape
- **Medications:** ~$6/kit

#### Conclusions

- The Heart Failure Rescue Kit is piloted in a closely monitored group of patients
- Education to all members of the patient’s care team is vital for the Rescue Kit’s success
- Dispensing workflow – a work in progress
- Opportunities for decreased readmission rates and decreased hospital cost are possible with the Heart Failure Rescue Kit

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QUESTIONS?

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References