De-Congesting the ER In Home Management of CHF

Jeff Beeson, DO, EMT-P, FACEP MedStar System Fort Worth, TX

95% of Training for 5% of Calls



A Better Way?

- Community Health Program
 - Identify frequent flyers
 - Wisit patient and determine "care plan"
 - Reviewed and approved by Medical Director
 - Regularly scheduled in-home visits
 - Overall assessment
 - Assure medication compliance
 - Socialize!
 - ⊕ Prevent the 9-1-1 call



Need Help?



Call Brent Myers...
1-800-NO-HELP

The Next Generation of EMS

Community Health

Critical Care Transport



Right <u>Patient</u> Right <u>Resource</u> Right <u>Time</u>



Advance Practice Paramedics





Response Vehicle Raleigh



and so are bad ASS chargers!



Call an Ambulance, Get a Taxi

Medstar considers calling taxis for some flu cases

By SCOTT GORDON

Updated 10:38 PM CDT, Tue, Oct 27, 2009



NBCDFW.com

Community Partners

- Hospitals
 - Social Workers
 - Discharge Planning
- Emergency Departments
 - Stand Alone
 - Free Standing
- Minor/Primary Care Clinics
- In Home/Transitional Care



Congestive Heart Failure

- * Fastest growing cardiac disease (2% population)
- Most frequent hospitalization diagnosis >6510 per 1000
- ⊗ 2% of all hospitalizations (6 days average)
- **⊗** 39.2 billion dollars in 2010 (2%)

Why CHF?



Fort Worth

- - All referred from hospitals
- Enrollment
 - Calls Increased
- Mostly Unfunded!

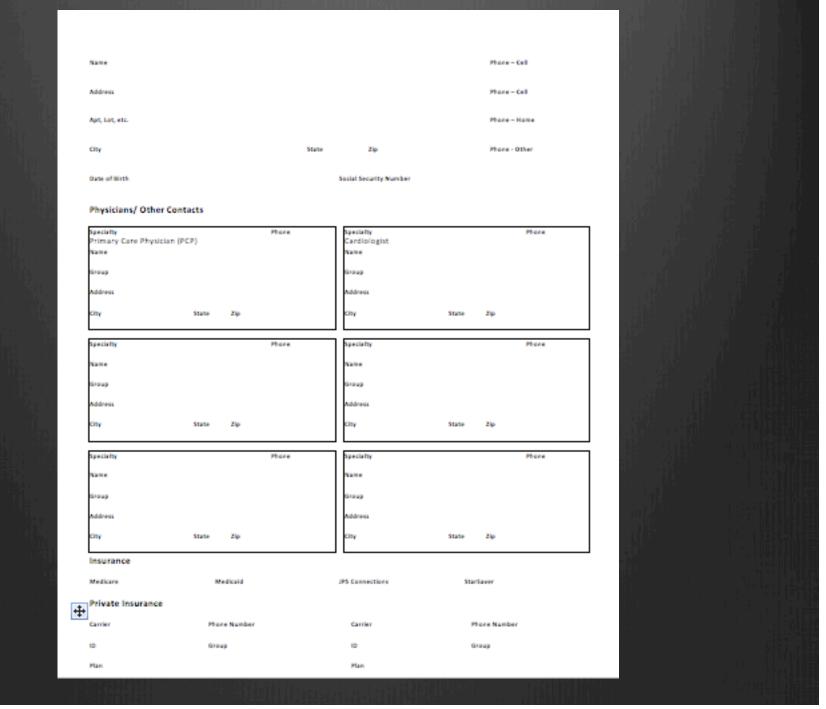
Home CHF Management

- Routine Weight
- Medication Compliance
- Diet Compliance
- Communication with Primary Care/Social Workers
- Community Approach

Secret Therapy







's Vital Sign Log

Instructions: Check your vital signs at the same time, with the same equipment, and in the same way every day.

Example: Check the first thing in the moming after you empty your bladder but before you eat breakfast. Weigh with as little clothing as possible.

						rregii waii as iase ci	
Date	Time	Weight	Blood Sugar	Blood Pressure	Heart Rate	Temp	Notes
Jan 1	am	300	110	164/90	90	98.7	Example





551 E Berry St. Fort Worth, Texas 76110

Phone: (817) 840-2062

Our Website: www.medstar911.org

Dear Patient:

If you have been told you have heart failure, you may be anxious and have many questions. What does it mean to have heart failure? How will heart failure affect my life? Can my heart failure be treated?

Heart failure is serious. However, you can often manage the symptoms to stay healthy and out of the hospital. This booklet will provide information to help control your symptoms through diet, exercise, lifestyle changes, and medication.

Understanding your condition and following the guidelines discussed in this booklet can help you successfully manage your heart failure and live a more comfortable life. Patients who understand their condition make better decisions, live a longer life, and feel better.

Sincerely, MedStar Community Health Program

Heart Failure Teaching Pathway

	Initial Visit 1	Visit 2	
Diagnostics	Base line Vitals EKG Blood Sugar Chem-8 Weight	Base line Vitals Blood sugar Weight Chem-8 and EKG As needed	
Medications	Review list of old and new medications Discuss med compliance and organization Evaluate for Perrone Pharmacy Qualifications	Review Med Compliance	
Activity	Walk around in your house	Walking around your house/yard	
Nutrition	Low salt diet Low fat diet You may be on a fluid restriction	Low salt diet Low fat diet You may be on a fluid restriction	
Consults	Review Discharge notes with team Make sure care at home is arranged Identify HHA/ MHMR Caseworker Document upcoming appointments with PCP or Specialist.	Confirm Compliance with follow up appointments with your PCP or Specialist.	
Patient/Family Education	Importance of weighing daily Signs and symptoms of heart failure	Importance of weighing daily Signs and symptoms of heart failure Measuring intake and output	
LEARN	Measuring intake and output Decreased salt in diet Learning your medications Increasing activity Stop smoking (if applies) ETOH/ Substance abuse (if applies) Learning about ejection fraction (if applies)	Decreased salt in diet Learning your medications Increasing activity Stop smoking (if applies) ETOH/ Substance abuse (if applies) Learning about ejection fraction (if applies)	
Daily Goals	Less shortness of breath episodes Output more than your intake	Less shortness of breath Decreasing edema (puffiness)	
SET, GOAL	Maintain or decrease weight Eat Better Exercise if appropriate Stop Smoking or Drinking ETOH	Maintain or decrease weight Eat Better Exercise appropriate Stop Smoking or Drinking ETOH	



Heart Failure Teaching Pathway

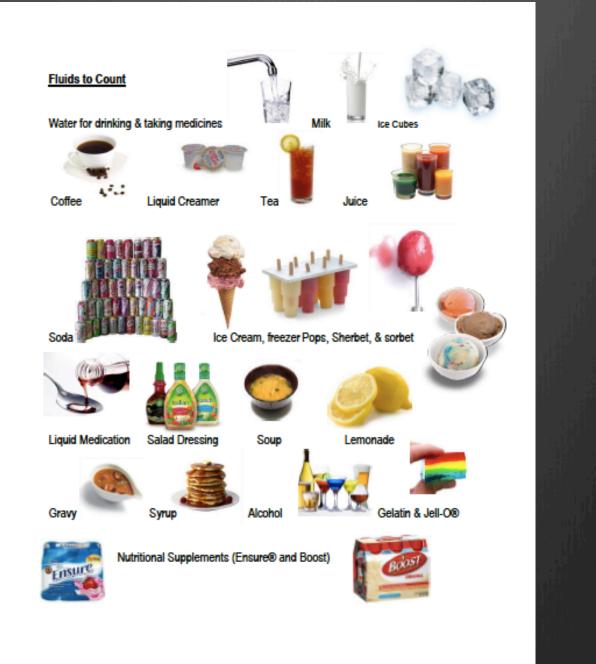
	Visit 3	Visit 4
Diagnostics	Base line Vitals Blood sugar Weight Chem-8 and EKG As needed	Base line Vitals Blood sugar Weight Chem-8 and EKG As needed
Medications	Review Med Compliance Check for new prescriptions	Review Med Compliance
Activity	Walk a block	increase to a couple blocks walked
Nutrition	Low salt diet Low fat diet You may be on a fluid restriction	Low salt diet Low fat diet You may be on a fluid restriction
Consults	Review CHP Goals	Overall review to assess graduation status
Patient/Family Education	Importance of weighing daily Signs and symptoms of heart failure	Importance of weighing daily Signs and symptoms of heart failure Measuring intake and output
LEARN	Measuring intake and output Decreased salt in diet Learning your medications Increasing activity Stop smoking (if applies) ETOH/ Substance abuse (if applies) Learning about ejection fraction (if applies)	Decreased salt in diet Learning your medications Increasing activity Stop smoking (if applies) ETOH/ Substance abuse (if applies) Learning about ejection fraction (if applies)
Daily Goals READY SET, GUAL	Able to take medications without any problems Increased knowledge of disease Maintain or decrease weight Eat Better Exercise if appropriate Stop Smoking or Drinking ETOH	Lungs clear Increased knowledge of disease, diet, activity, medications Maintain or decrease weight Eat Better Exercise if appropriate Stop Smoking or Drinking ETOH



Table of Contents

Topic Page
What Can I Do?6
What is Heart Failure?7
Causes of Heart Failure9
Symptoms of Heart Failure
Common Tests
What Are My Responsibilities? 14
What Do I Change About My Diet?16
Limit Cholesterol and Fat
Why So Many Medications?19
Understanding Your Medications20
What About Over-The-Counter and Herbal Medications?25
Device Therapy for CHF26
How Active Can I Be?27
Sexual Difficulties and Coping Strategies 28
When Do I Call My Physician? 29
What Does the Future Hold?





TIPS TO BE SODIUM SAAVY

The following information can help when you are planning your menus and grocery lists. There are many ideas for flavorful foods without using salt in cooking or at the table.

MENU PLANNING

- As a rule of thumb, use products with no more than 1 milligram of sodium for each calorie.
- 2. Make tradeoffs when planning menus.
- Make your favorite foods from scratch rather than purchasing their frozen counterparts. If you like convenience, double the recipe and freeze half for future meals.
- Plan for larger servings of grains, fruits and vegetables and less of the entrée.
 Often, the entrée has the most salt.
- To add variety to any meal, serve several different vegetables, fruits, or grains.

SHOPPING

- Use caution when purchasing foods labeled "instant". These have a high sodium content to keep the product fresh on the supermarket shelves.
- Read food labels. Reduced sodium means that the amount of sodium is less than in the regular version. Low sodium means that the product has less than 140 milligrams of sodium in each serving.
- Check the manufacturer's serving size. It may be less than what you are using.
- 4. Check out old favorites such as soups and packaged items. Many food companies have new versions that are low in sodium or reduced in salt content. Read the labels carefully! There can be a big difference in the amount of sodium.
- Check with your pharmacist about the sodium content of "over the counter" medications that are used.
- Try a new recipe every month (or week)! Add ingredients to your shopping list.
- Look carefully at frozen chicken breasts. Some companies freeze them in a sodium and water mixture, while others use an "individual quick freezing (IQF)" process.



Reading a Food Label for Sodium Content

- Begin by reviewing the serving size and sodium content information. See the shaded areas on the sample label.
- The serving size for the food on this label is 5 oz. (ounces). The sodium content for that serving is 440 mg.
- If you eat the same sized serving as the one listed on the label, then you are eating the amount of sodium that is listed.
- 4. But if the amount you actually eat is either larger or smaller, the amount of sodium you will be eating will also be larger or smaller. For example, if you eat a double portion (10 oz) of the food shown above, you will also be eating twice as much sodium (880 mg of sodium) as listed on the label.
- By reading food labels, you can learn which foods are high and low in sodium. As a rule, most processed foods, whether they are frozen, canned, or boxed, are high in sodium.

Nutrition Fac	cts				
Serving Size 5 oz					
Servings Per Container 4					
Amount Per Serving					
Calories 90 Calories from Fat 30					
% Dully	/ Value*				
Total Fat 3g	5%				
Saturated Fat 0g	0%				
Cholesterol 0mg	0%				
Sodium 440mg	19%				
Total Carbohydrate 13g	4%				
Dietary Fiber 3g	4%				
Sugars 3g					
Protein 3g					
Vitamin A 80% • Vitamin C	60%				
Calcium 4% • Iron	496				
* Percent Daily Values are based on a 2 calorie diet. Your daily values may be					

or depending on your calorie needs:

More nutrients may be listed on some labels

For example, most frozen TV dinners, frozen snack foods such as pizza rolls and egg rolls, canned vegetables, and instant hot cereals are high in sodium and should be avoided.

Year One!

- **⊗** 31 Graduated



In Home Diuresis

- Requested by Cardiologists
- Currently in Approval Process
- Goal
 - Decrease Readmission



Chronic CHF Management

Contra-Indications

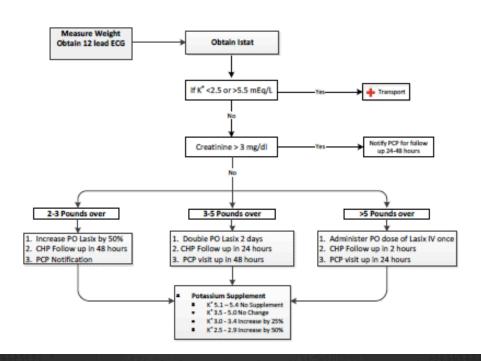
- Weight gain of less than 2 pounds over baseline.
- Creatinine of <2.5 mg/dl
 Potassium of < 2.5 mEq/L or >5.5 mEq/L
- Acute clinical changes such as chest pain, dyspnea, or signs of acute decompensation.

Considerations

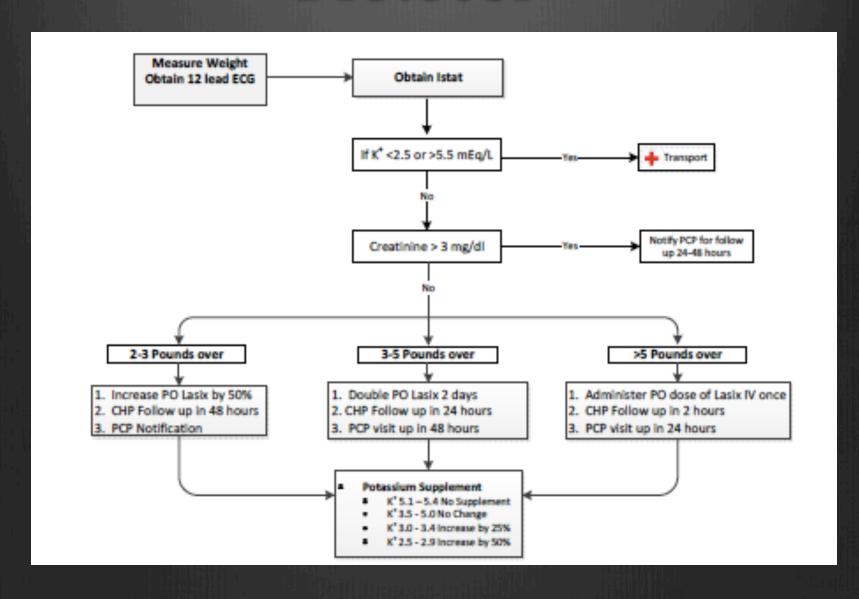
- Patient's baseline vital signs and lab values.
- Educate patient on appropriate dietary and medication compliance.
- Ensure that sample is not hemolized.
- Encourage ingestion of food or milk to reduce GI upset if potassium dose is increased.
- Have patient record weight daily.
- Evaluate the patient's entire set of lab values in relation to patient presentation.

Transport Criteria

- Dehydration or other signs and symptoms of volume depletion.
- Elevated BUN/Creatinine
- Acute clinical changes such as chest pain, dyspnea, or signs of acute decompensation.
- Any discomfort on the part of the APP about the patient's presentation.



Protocol



The Future is Here

- Alternative Responses
 - Triage protocol
 - Non-ambulance transport
- Alternative Destinations
 - Stand Alone/Free Standing
 - Primary Care
- Medical Home
- Reimbursement



Pay for Performance

- Accountable Care Organizations
- Medical Home
- Work closely with Hospitals/Payers
- How do we benefit healthcare

Who Moved My Cheese?



Think Outside the Box!

A JPS DIGITAL SHORT

