GET WITH THE GUIDELINES®-HEART FAILURE ENHANCED HEART FAILURE PATIENT EDUCATION PRIOR TO HOSPITAL DISCHARGE

Why is enhanced patient education prior to discharge so important?

Patient education is key in order to detecting changes in body weight or clinical status early enough to allow the patient or a healthcare provider an opportunity to institute treatments that can prevent clinical deterioration in those patient with heart failure.[1-2] However, education of patients and their caregiver(s) can often be complex. It is critical for patients and their caregiver(s) to understand how best to comply with physicians and other healthcare providers instructions. Understanding care instructions has been associated with improved patient outcomes, such as reduced hospital readmissions.

There is data which supports the value of enhanced patient education in improving care and potentially reducing readmission. In a meta-analysis of 18 studies patients who received appropriate patient education and proper discharge support showed a trend toward lower all-cause mortality, length of stay, hospital costs, and an improvement in quality-of life scores.[3]

What is the goal of patient education?

The goals of heart failure patient education are to help patients and their caregiver(s) acquire the knowledge, skills, strategies, problem solving abilities, and motivation necessary for adherence to the treatment plan and effective participation in self-care. Upon discharge, patient and caregiver(s) should be aware and supportive of self-care follow-up plans, how to care out self-care follow-up plans, and understand the importance of adherence to a patient's health-related quality of life.

Why is Get With The Guidelines®-Heart Failure asking hospitals if the patient was provided with 60 minutes of patient education prior to discharge?

At least 60 minutes of patient education is needed in order to ensure that the patient and/or their caregiver(s) understand what actions must be taken post discharge. In one study a 60 minute teaching session delivered by an RN educator at the time of hospital discharge to patients with heart failure using standardized instructions resulted in improved clinical outcomes, increased self-care measure adherence, and reduced cost of care.[4]

Who Should Provide the Education to the Patient and/or the Patient's Caregiver(s)?

Education and counseling should be delivered by providers with the required knowledge base and using a team approach. RNs with expertise in heart failure management should provide the majority of education and counseling, supplemented by physician input and, when available and needed, input from dietitians, pharmacists, and other health care providers.

Does the patient education need to occur in a single 60 minute session or can the education be broken into multiple sessions so long as they total 60 minutes or more?

The patient education does not need to occur in a single 60 minute session, but can be broken up by the educator into multiple sessions so long as they total 60 or more minutes.

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What domains should be covered during the 60 minute educational session?

The 60 minute patient education should include discussion on each of the following domains:

01 ***Recognition of escalating symptoms and concrete plan for response to particular symptoms.*** The patient/caregiver(s) should be able to identify specific signs and symptoms of heart failure, and explain actions to take when symptoms occur. Actions may include a flexible diuretic regimen or fluid restriction for volume overload. Example of signs and symptom include:

- Shortness of breath (dyspnea)
- Persistent coughing or wheezing
- Buildup of excess fluid in body tissues (edema)
- Tiredness, fatigue, decrease in exercise and activity
- Lack of appetite, nausea
- Increased heart rate

A concrete plan for response for each particular symptom should be discussed. Close monitoring, which includes surveillance by the patient and his or her family, can lead to the detection of changes in body weight or clinical status early enough to allow the patient or a healthcare provider an opportunity to institute treatments that can prevent clinical deterioration.

02 ***Activity/exercise recommendations.*** In order to reduce chances of readmissions, and to improve ambulatory status, it is important for the patient to follow specific exercise recommendations provided by the patient educator. Instructions should include how to carry out the activity/exercise, how long to carry out the activity/exercise, expected physiological changes with exercise (moderate increase in heart rate, breathing effort and diaphoresis), type and length of time completing warm-up exercises and type and length of time completing cool-down exercises.

The AHA/ACC Chronic Heart Failure guidelines state that: *"Exercise training is beneficial as an adjunctive approach to improve clinical status in ambulatory patients with current or prior symptoms of HF and reduced LVEF (Class I, Level of Evidence B)."* [1]

03 ***Indications, use, and need for adherence with each medication prescribed at discharge.*** Patients require guidance on how to institute an individualized system for medication adherence. Nonadherence with heart failure medications can rapidly and profoundly adversely affect the clinical status of patients. During the patient education period, it is important for the educator to reiterate medication name, dosing schedule, basic reason for specific medications, expected side effects, and what to do if a dose is missed. Asking patients to read and interpret the instructions from a prescription medication bottle or procedure preparation instructions provides a good literacy assessment. Patients require guidance on how to institute an individualized system for medication adherence, especially when the medication schedule requires doses to be taken when outside of the home. During the patient education period, the educator should assess ability to read labels as needed and ensure that the patient/caregiver have a plan for refilling medications on time to further promote medication adherence.

04 ***Importance of daily weight monitoring.*** Sudden weight gain or weight loss can be a sign of heart failure or worsening of condition. Therefore, the patient/caregiver(s) should understand the importance of measuring the patient's weight on a daily basis, how today's weight compares with "dry" weight, normal and exceptional limits of weight gain, and actions to take when weight increases above set limits, suggesting volume overload.

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05 ***Modify risks for heart failure progression.*** Below are some of the modifiable risk factors to discuss, as needed, prior to patient discharge:

- *Smoking cessation:* If the patient is a smoker, then the educator should provide counseling on the importance of smoking cessation. A smoking cessation intervention may include smoking cessation counseling (eg, verbal advice to quit, referral to smoking cessation program or counselor) and/or pharmacological therapy).
- *Maintain specific body weight that promotes a "normal" body mass index:* provide counseling on the effects of obesity on insulin resistance, blood pressure and heart function. Provide practical information about eating a well balanced diet, high in fruits and vegetables and low in saturated fats and non-whole grain carbohydrates.
- *Maintain blood pressure in target range:* The blood pressure goals should be reviewed with each patient.

06 ***Specific diet recommendations: individualized low-sodium diet; recommendation for alcohol intake.***

- *Sodium Restriction:* Patient/caregiver(s) should be able to understand and comply with sodium restriction. This includes advising patients/caregiver(s) on how to read a food label to check sodium amount per serving and sort foods into high- and low-sodium groups. Counseling also includes discussion and possibly demonstration of how to achieve and maintain a low sodium diet when eating away from the home (restaurant, when shopping or at another social gathering or at the homes of friends/relatives), when snacking, when desiring ethnic foods, and when the budget is limited.
- *Alcohol:* Patients/Caregiver(s) should be able to understand the limits for alcohol consumption or need for abstinence if history of alcoholic cardiomyopathy.

07 ***End of Life.*** Patients/Caregiver(s) should be educated on end of life, whenever appropriate. According to the AHA/ACC guidelines: *"Options for end-of-life care should be discussed with the patient and family when severe symptoms in patients with refractory end-stage HF persist despite application of all recommended therapies" (Class I, Level of Evidence: C).*[1]

08 ***Follow-up Appointments:*** Patients/Caregiver(s) should understand the rationale of the follow-up appointment in improving the patient's quality of life and reducing readmission even if the patient feels fine. The location, date, and time of the follow-up appointments should be provided in writing to the patient prior to hospital discharge.

09 ***Discharge Instructions:*** Failure of these patients to understand how best to comply with physician's and other healthcare providers' instructions is often a cause of heart failure exacerbation leading to subsequent hospital readmission. A critical component of care coordination and transitions of care are that of written discharge instructions and educational materials given to patient and/or caregiver at discharge to home or during the hospital stay addressing all the above domains. Education of HF patients and their families is critical and often complex.

The patient/caregiver (s) should be provided with comprehensive written discharge instructions. This should include an emphasis on domains previously discussed but with special emphasis on: *"The following 6 aspects of care: diet, discharge medications, with a special focus on adherence, persistence, and uptitration to recommended doses of ACE inhibitor/ARB and beta-blocker medication, activity level, follow-up appointments, daily weight monitoring, and what to do if [heart failure] symptoms worsen" (Class I, Level of Evidence: C).*[1]

1 ACC/AHA 2009 Guideline Update for the Diagnosis and Management of Chronic Heart Failure in the Adult http://circ.ahajournals.org/cgi/reprint/CIRCULATIONAHA.109.192064.

2 HFSA 2010 Comprehensive Heart Failure Practice Guideline: Section 8: Disease Management, Advance Directives, and End-of-Life Care in Heart Failure Education and Counseling http://www.onlinejcf.com/article/S1071-9164(10)00223-X/fulltext .

3 Phillips CO, Wright SM, Kern DE, et al. Comprehensive discharge planning with post discharge support for older patients with congestive heart failure: a meta-analysis. JAMA. 2004;291:1358–67.

4 Koelling TM, Johnson ML, Cody RJ, et al. Discharge education improves clinical outcomes in patients with chronic heart failure. Circulation. 2005;111:179–85.

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