

Recognizing heart failure symptoms can improve patient self-management

To promote better outcomes, teach patients how to care for themselves

By Sharon E. Vincent, DNP, RN, MSN, and Karen S. Mutsch, DNP, RN MSN

DESPITE life-sustaining medical management for patients with critically worsening symptoms, heart failure (HF) prevalence continues to rise. An estimated 5.7 million adult Americans have HF, and the prevalence is expected to rise 46% from 2012 to 2030, resulting in more than 8 million adults with HF.

The ability to recognize early and progressive HF signs and symptoms is crucial for both patients and clinicians. Yet even some experienced nurses lack recognition skills, so they're unable to teach these to patients. Patients who are discharged without learning how to care for themselves and when to seek timely treatment may need to be readmitted repeatedly. It has been estimated that 1 in 4 Medicare patients with HF are readmitted within 30 days of discharge.

Current guidelines from the American College of Cardiology Foundation/American Heart Association and the Heart Failure Society of America focus on such care priorities as diet, discharge medications, daily weights, fluid restriction, physical activities, symptom recognition, what to do if symptoms worsen, when and how to seek medical help, and required follow-up.

Eliminating the disconnect

Nurses need to be more aware of worsening HF symptoms reported by patients. Studies show a dis-



LEARNING OBJECTIVES

1. Identify why self-management is important in patients with heart failure (HF).
2. State causes of nonadherence in patients with HF.
3. Discuss interventions nurses can use to enhance self-management in patients with HF.

The author and planners of this CNE activity have disclosed no relevant financial relationships with any commercial companies pertaining to this activity.

Expiration: 2/1/18

connect between what patients report and how nurses respond. Listen closely when HF patients report their symptoms. Taking appropriate action after assessment may prevent the need for immediate readmission and improve self-management.

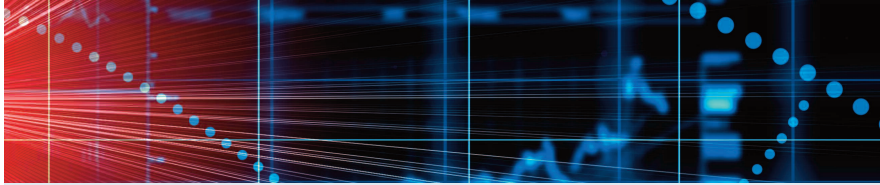
Make sure you know how to recognize early signs and symptoms of HF decline—and stay alert for them. Prompt recognition and action can prevent undue pain and suffering. Familiarize yourself with new evidence and HF guidelines, such as the Heart Failure Society of America's Comprehensive Heart Failure Practice Guidelines.

Teach patients how to recognize symptoms of HF exacerbation and when to report them. Most HF patients wait 2 to 7 days before seeking help, during which time their symptoms may get worse. Delays may contribute to additional suffering, treatment, and costs.

Case study

Nonadherence to self-management is linked to increased readmissions and mortality. In the case study below, the patient didn't understand what might happen if he didn't follow self-management instructions.

Mr. B recently visited the clinic after multiple hospital readmissions for dyspnea, shortness of breath, and fatigue. A white male in his 50s, he had HF with uncon-



Building trust with patients

Here are some ways to work effectively with a patient like Mr. B:

- Ask him to describe his understanding of HF in his own words.
- Work to build a more effective therapeutic partnership: “How could we approach this more effectively?” or “What are some obstacles that have stopped us from dealing with this better?”
- Ask if he understands the purpose of his prescribed diet and possible consequences of not following it: “I’m concerned that if your diet isn’t better controlled, you could develop serious complications.”
- Use open-ended questions: “Are you comfortable following the goals we’ve talked about for diet, or do you see any problems?”
- Work with the patient mutually to find solutions to identified adherence problems.
- If you’re having trouble identifying causes of nonadherence, consider screening the patient for depression, dependence, or dementia.
- Enlist the patient’s family and friends, colleagues, case managers, and outside agencies for support.

trolled diabetes, hypertension, and obesity. He didn’t adhere to self-management practices and joked that he ambulated to the vending machine without his wife’s knowledge to buy snacks while pushing his I.V. infusion pump. When asked about his most severe problems, Mr. B stated he was most affected by weight gain after HF diagnosis because it impaired his ability to perform independent hygiene measures. Yet he said he’d probably continue to eat what tasted good, even though he knew added fluid retention and weight contribute to increased cardiomyopathy, poor quality of life, and increased symptoms of acute HF.

Reasons for nonadherence

Why do some patients fail to adhere to self-management plans? Reasons remain unclear. We know comorbidities, altered mental status, and poor literacy can affect adherence. Also, some patients may avoid self-care as a means of coping; others may fear acute-care settings or feel they’re a burden to others. Yet reporting HF symptoms promptly is crucial if patients wish to avoid more suffering and longer hospital stays. They need to be able to recognize symptoms of deterioration and seek help promptly.

Dealing with nonadherence

A patient like Mr. B who doesn’t adhere to the prescribed diet may be in denial. In many cases, denial is a defense against stress. Developing a trusting relationship with the patient can lead to a useful discussion. Be sure to take a careful approach when trying to build trust; otherwise the patient might feel threatened. (See the box below.)

Recommendations

Primary care providers should thoroughly assess patients’ medications and management plans and collaborate with other interdisciplinary care providers who are monitoring the patient’s comorbid conditions. Question the patient about daily weights as part of early symptom recognition to help determine the severity of his or her condition.

Focus on teaching patients symptom-monitoring skills to help them recognize elevated HF risk. Existing practices include increasing patient knowledge and helping patients understand the importance of seeking help at the first sign of worsening symptoms. Instruct patients about dietary and weight recommendations and activities of daily living. Stress the importance of taking daily weights, and advise

patients on how to integrate this practice into daily life.

Ideally, use the teach-back approach. With this technique, ask the patient to explain what you have presented, so you can determine the level of understanding. This helps you gauge what additional teaching to provide. For instance, if you say to a woman with HF, “Please explain how you plan to weigh yourself” and she says, “I’ll weigh myself every other day after I get dressed,” you know you need to reinforce the need for her to weigh herself every day wearing the same clothes to ensure consistency.

Some discharged patients may not know they’re supposed to discontinue a medication they were taking before hospitalization. Instead, they keep taking it after discharge—in addition to a newly prescribed drug with similar effects. To prevent this, review the patient’s medications at discharge and have the patient rewrite the information you’ve taught on a wallet card to demonstrate understanding. Provide handouts on symptom management and instruct patients to reread the information once they get home. If you’re a home-care nurse, review all medications and treatment protocols with patients during home visits.

Psychodynamic approach to teaching

Instead of simply telling or asking patients to perform a certain self-management task, try to inspire and motivate them. It’s not enough to get their teach-back verbalization of what it means to take daily weights. Instead, describe outcomes of daily weight patterns thoroughly to help them understand how weight gain can lead to worsening symptoms. This can motivate them to set goals for maintenance and to seek help promptly when needed.

Using a psychodynamic ap-

Green, yellow, red: Heart failure action plan

proach to lifestyle changes, a psychotherapist can work to improve the patient's health behaviors and readiness to change by offering guidance in affective and physical activity behaviors. The therapist and patient set goals for what they hope to achieve. They identify such barriers as negative thinking and stressors, as well as healthy lifestyle choices that can improve physical status (such as walking rather than driving or riding in a car). Interventions aim to motivate, inspire, and encourage patients to be more caring about themselves, as reflected in improved health behaviors—especially more physical activity or supervised strength-training activities. Physical outcomes of gains in aerobic capacity and physical endurance may be used to measure improvements in lifestyle choices, along with improved anxiety and depression scores.

Practical tools that boost adherence

Practical tools can improve patient adherence, enhance quality of life, and reduce the need for readmission.

Symptom and event diary

Using a symptom and event diary can help patients recognize symptoms. This strategy is recommended by the Patient Care Committee of the Heart Failure Association of the European Society of Cardiology. Instruct patients to record their symptoms and other events in the diary, along with a description and the date and time of each symptom or event. Advise them to rate the symptom or event on a scale of 1 to 5 (with 1 indicating mild and 5 indicating severe) and to add any relevant notes. Instruct patients to take the diary with them to their next medical visit and discuss it with their healthcare provider. (For an example of a symptom diary, visit www.heartfailurematters.org/static_file/HeartFailureMatters/

This “stoplight” tool uses green, yellow, and red zones and short instructions to help patients recognize symptoms and take appropriate action.

GREEN:

You are doing well.

- No shortness of breath
- Stable weight
- Little or no swelling
- Able to maintain usual activity
- No chest pain

ACTION:

Continue current medications, diet:

- Weigh yourself daily.
- Limit fluids to 2 liters/day.
- Limit sodium to 2,300 mg/day.

YELLOW: CAUTION.

Symptoms indicate you may need to talk to your provider.

- Increased shortness of breath
- Trouble sleeping, or having to use more pillows
- Sudden weight gain of 2 lb in 1 day or 5 or more in 1 week
- Increased abdominal or foot or leg swelling
- Decreased energy

ACTION:

Continue yellow treatment plan.

- Medications (list each) _____
- Instructions: If you gain 2 lb in a day, take an extra diuretic dose.
- Watch your salt intake.

RED:

YOU MAY NEED HELP IMMEDIATELY!

Symptoms very unstable; you may need to be evaluated by provider NOW if actions haven't helped.

- Extreme difficulty breathing even at rest
- Weight gain of 4 lb or more in 1 day
- Wheezing or chest pain
- Severe weakness, dizziness, or fatigue.

ACTION:

Call provider at once. This is a MEDICAL EMERGENCY!

- If appropriate, call 911!
- Don't wait to see if symptoms improve, or try to treat this yourself.

Provider telephone #: _____

Adapted from resources at hfnf.gov

[Documents/EN/Symptoms_and_events_diary.pdf](#))

Warning signs instruction sheet

Provide an instruction sheet to patients at the time of discharge. Suggest they post it on their refrigerator along with their prescribed medication regimen and emergency numbers to call. Instruct patients to call their primary care provider immediately if they experience warning signs (such as worsening and persistent shortness of breath or chest pains unrelieved by nitroglycerin) or if they need more pillows to sleep, continue to wake up short of breath, or have worsening palpitations. Urge them to contact their provider if they experience extreme fatigue or gain 2 lb in one day or more than 5 lb in a week.

Stoplight tool to improve symptom recognition

For active symptom monitoring, patients must be able interpret their signs and symptoms well enough to prevent further deterioration and readmission. A recent study used a “stoplight” tool to aid patients' symptom recognition. (See *Green, yellow, red: Heart failure action plan*.)

At every encounter with the patient and family caregivers or others support persons, discuss each component of the patient's self-management, including diet, weight, medications, activities of daily living, and worsening of symptoms. See (*Examples of HF self-management components*.)

Self-management is the key

Nurses are responsible for helping

Examples of HF self-management components

Be sure to cover the following topics when teaching HF patients and their family caregivers how to manage their disease.

Self-management component	Examples and suggestions
Diet	<ul style="list-style-type: none"> • Restrict sodium intake to 2,300 mg/day (or less if prescribed). Substitute basil, cilantro, or rosemary for salt. • Measure serving sizes. • Keep fruits and vegetables available for snacks. • Avoid canned fruit in heavy syrup and fried or breaded vegetables. • Consume whole-wheat, whole-grain, high-fiber breads, pasta, and cereals. • Limit saturated fats to less than 14 g in a 2,000-calorie diet. • Limit solid fats (butter, margarine, shortening). Use olive or canola oil instead. • Consume only low-fat protein foods, such as fish, beans, low-fat dairy, and soybeans.
Weight	<ul style="list-style-type: none"> • Weigh yourself daily at the same time and place, wearing the same clothes, after urinating and before drinking. • Know your dry and wet normal weights.
Fluid restrictions	<ul style="list-style-type: none"> • Record your daily fluid intake.
Medications	<ul style="list-style-type: none"> • Take prescribed medications as ordered. • Discuss your medications at each visit with your provider.
Activities of daily living	<ul style="list-style-type: none"> • Get at least 2½ hours of exercise weekly.
Worsening of symptoms	<ul style="list-style-type: none"> • If your symptoms worsen, contact your primary care provider or call 911. Refer to the “Green, yellow, red: Heart failure action” tool.

Note to clinicians: Give patients information about signs and symptoms of complications related to their comorbidities. Examples include pulmonary embolus, stroke, electrolyte disturbances, diabetic ketoacidosis, and repeated implantable cardioverter defibrillator firings.

HF patients improve their self-management strategies, including recognizing symptoms that could lead to deterioration or readmission. These strategies improve when nurses explain how patients' actions can help them retain an acceptable quality of life and avoid readmission. To provide accurate information, keep your HF knowledge base up-to-date and stay current with updated cardiac guidelines. Make sure you're

familiar with medications used to treat HF and know how to recognize and intervene for worsening signs and symptoms. Taking every opportunity to teach patients how they can better care for themselves at home can lead to better outcomes. ★

Selected references

Clark AM, Savard LA, Spaling MA, et al. Understanding help-seeking decisions in peo-

ple with heart failure: a qualitative systematic review. *Int J Nursing Stud.* 2013;49(12):1582-97.

Heart Failure Matters. Usefool tools. www.heartfailurematters.org/en_GB

Heart Failure Society of America; Lindenfeld J, Albert NM, Boehmer JP, et al. HFSA 2010 Comprehensive Heart Failure Practice Guideline. *J Card Fail.* 2010;16(6):e1-194.

Hunt SA, Abraham WT, Chin MH, et al. 2009 focused update incorporated into the ACC/AHA 2005 Guidelines for the Diagnosis and Management of Heart Failure in Adults: A Report of the American College of Cardiology Foundation/American Heart Association Task Force on Practice Guidelines; developed in collaboration with the International Society for Heart and Lung Transplantation. *Circulation.* 2009;119(14):e391-479.

Jaarsma T, Nikolova-Simons M, van der Wal MH. Nurses' strategies to address self-care aspects related to medication adherence and symptom recognition in heart failure patients: an in-depth look. *Heart Lung.* 2012;41(6):583-93.

Lainscak M, Blue L, Clark AL, et al. Self-care management of heart failure: practical recommendations from the Patient Care Committee of the Heart Failure Association of the *European Society of Cardiology.* *Eur J Heart Fail.* 2011;13(2):115-26.

Mozaffarian D, Benjamin E, Go AS, et al. Heart disease and stroke statistics—2015 update: a report from the American Heart Association. *Circulation.* 2015;131.

Mutsch KS, Herbert M. Medication discharge planning prior to hospital discharge. *Qual Manag J.* 2010;17(4):25-35.

Prasun MA, Casida J, Howie-Esquivel J, et al. Practice patterns of heart failure nurses. *Heart Lung.* 2012;41(3):218-25.

Yancy CW, Jessup M, Bozkurt B, et al; American College of Cardiology Foundation; American Heart Association Task Force on Practice Guidelines. 2013 ACCF/AHA Guideline for the Management of Heart Failure: A Report of the American College of Cardiology Foundation/American Heart Association Task Force on Practice Guidelines. *Circulation.* 2013;128:e240–e327.

Sharon E. Vincent is a clinical assistant professor at the College of Health and Human Sciences School of Nursing, University of North Carolina, Charlotte.

Karen S. Mutsch is an associate professor at the College of Health Professions, Department of Advanced Studies, in Northern Kentucky University, Highland Heights.

Provider accreditation

The American Nurses Association's Center for Continuing Education and Professional Development is accredited as a provider of continuing nursing education by the American Nurses Credentialing Center's Commission on Accreditation. ANCC Provider Number 0023.

Contact hours: 1.0

ANA's Center for Continuing Education and Professional Development is approved by the California Board of Registered Nursing, Provider Number CEP6178 for 1.3 contact hours.

Post-test passing score is 75%. Expiration: 2/1/18

ANA Center for Continuing Education and Professional Development's accredited provider status refers only to CNE activities and does not imply that there is real or implied endorsement of any product, service, or company referred to in this activity nor of any company subsidizing costs related to the activity. The planners and author of this CNE activity have disclosed no relevant financial relationships with any commercial companies pertaining to this CNE.

Please mark the correct answer online.

1. The incidence of heart failure (HF) is expected to increase by what percentage from 2012 to 2030?

- a. 23%
- b. 33%
- c. 46%
- d. 56%

2. What is the estimated number of Medicare patients with HF readmitted within 30 days of hospital discharge?

- a. 1 in 2
- b. 1 in 4
- c. 1 in 8
- d. 1 in 10

3. Which statement about self-management of HF patients and readmission is correct?

- a. Nurses should listen closely to patients' reports of signs and symptoms to reduce readmission.
- b. Patients who have had HF for 5 or more years are able to engage in self-management.
- c. Nurses should give patients time to develop their own strategies for reporting signs and symptoms.
- d. Studies show that nurses listen well when patients report their signs and symptoms of HF.

4. The average number of days HF patients wait before seeking help after they begin to experience exacerbation of symptoms is:

- a. 1 to 2.
- b. 3 to 5.
- c. 2 to 7.
- d. 5 to 10.

5. Which of the following is not a common reason why HF patients don't follow a self-management plan?

- a. Comorbidities
- b. Altered mental status
- c. Poor literacy
- d. Positive coping

6. A way to build trust with patients is to:

- a. limit the time for them to ask questions about HF.
- b. ask them to describe their understanding of HF.
- c. ask questions that require a yes or no answer to save time.
- d. avoid working with the patient's family.

7. Mrs. Smith has had HF for the past year. She currently weighs 140 lb. Which of the following values should prompt her to contact her healthcare provider?

- a. Weight of 140.5 lb the next day
- b. Weight of 141 lb the next day
- c. Weight of 146.5 lb in a week
- d. Weight of 143 lb in a week

8. In general, Mrs. Smith should limit her fluid intake to:

- a. 1 L/day.
- b. 2 L/day.
- c. 3 L/day.
- d. 4 L/day.

9. Which of the following symptoms should prompt Mrs. Smith to seek help immediately?

- a. Increased leg edema
- b. Decreased energy
- c. Having to use an extra pillow to sleep
- d. Wheezing

10. Which of the following should indicate to Mrs. Smith that she might need to talk to her provider?

- a. Decreased abdominal swelling
- b. Having to use an extra pillow to sleep
- c. Stable weight
- d. Decreased leg swelling

11. You should instruct Mrs. Smith to restrict her sodium intake to:

- a. 1,000 mg/day or less if prescribed.
- b. 1,200 mg/day or less if prescribed.
- c. 2,300 mg/day or less if prescribed.
- d. 3,500 mg/day or less if prescribed.

12. Mrs. Smith typically consumes a 2,000-calorie/day diet. You should instruct her to limit her saturated fat intake to:

- a. less than 14 g.
- b. less than 18 g.
- c. less than 20 g.
- d. less than 24 g.

13. How often should you recommend to Mrs. Smith that she exercise in a week?

- a. 2½ hours
- b. 3½ hours
- c. 4 hours
- d. 5 hours