

HEART FAILURE

Estimated Time: 30 minutes • Debriefing Time: 30 minutes



Scan to Begin



Patient Name: Hector Fernandez

SCENARIO OVERVIEW

Hector Fernandez is a 62-year-old Hispanic male patient who presents to a clinic for a routine follow-up visit for his heart failure. Students obtain a patient history and vital signs, perform medication reconciliation and employ elements of therapeutic communication.

LEARNING OBJECTIVES

1. Demonstrate professionalism in a healthcare setting
2. Practice standard precautions
3. Obtain vital signs
4. Obtain patient history
5. Employ elements of therapeutic communication based upon theories of psychology
6. Assist physician with patient care: routine examinations
7. Analyze the causes, signs and symptoms, diagnosis, treatment, and prevention of common diseases and disorders of the cardiovascular system

CURRICULUM MAPPING

WTCS PROGRAM OUTCOMES

- Provide patient care in accordance with regulations, policies, laws, and patient rights
- Demonstrate professionalism in a healthcare setting
- Demonstrate safety and emergency practices in a healthcare setting

SIMULATION LEARNING ENVIRONMENT & SET-UP

PATIENT PROFILE

Name: Hector Fernandez	Weight: 86.4 kg (190 lbs)
DOB: 09/06/19xx	Allergies: Penicillin
Age: 62	Code Status: Full code
MR#: 41219	Ethnicity: Hispanic
Gender: Male	Spiritual Practice: Catholic
Height: 175 cm (5 ft 10 in)	Primary Language: Spanish

EQUIPMENT/SUPPLIES/SETTINGS

Patient

- Street clothes
- Has Ziploc bag of various medications with him
 - Facilitator note: medication bottles can be blank with the QR medication codes below attached to each bottle for students to view a realistic label. Otherwise, to create your own labels the medications are:
 - Aspirin 81 mg PO
 - Furosemide 40 mg PO
 - Lisinopril 10 mg PO
 - Metoprolol tartrate 25 mg PO
 - Atorvastatin 40 mg PO
 - Digoxin 0.125 mg PO
 - Acetaminophen 500 mg PO
 - Regular insulin vial
 - Lantus insulin vial

Monitor Settings

- Vitals: HR 68, RR 15, BP 188/94, Temp 37.4, O2 sat 100% on RA, Pain 2/10

- If students ask about patient's weight today, tell them the scale reads "200 pounds"

Supplies

- Equipment to obtain vitals including oxygen saturation

QR CODES

<p>REPORT</p> 	<p>PATIENT</p> 	<p>LEG</p> 	<p>ASPIRIN</p> 
<p>ATORVASTIN</p> 	<p>DIGOXIN</p> 	<p>FUROSEMIDE</p> 	<p>LISINOPRIL</p> 
<p>METOPROLOL</p> 	<p>ACETAMINOPHEN</p> 	<p>FACILITATOR</p> 	

TEACHING PLAN

PREBRIEF

The facilitator should lead this portion of the simulation. The following steps will guide you through Prebrief.

- Scan the **QR code: “Scan to Begin”** while students are in Prebrief.
- “Meet Your Patient” (on iPad) and explain how the iPad works in the simulated learning environment including:
 - Explain how to use the iPad scanner and QR codes. Remind students that there are multiple QR codes in the simulation, but they should only scan them if they think it will provide data necessary for their assessment and evaluation of the patient.
 - For some scenarios, it may be helpful to tell students where the QR code are located. For others, you may want students to “find” the QR codes during their assessments. This is your choice.
 - As the facilitator, you should be aware that throughout the simulation some QR codes are necessary to the programming of the iPad content. Directions for which QR codes are required (to be scanned) in each state are listed under each state of the documentation below. The QR codes are also in **BOLD** type.
- Discuss the simulation “Learning Objective(s)” (on iPad) as well as any other Prebrief materials
- Get “Report” on iPad
 - Possible Facilitator Questions
 - What are your priorities when you are rooming a patient with heart failure?
- Play the “Patient” video on iPad
 - Possible Facilitator Questions
 - After listening to the patient’s statement, is there anything you would like to add to your plan?
- Advance to the “Patient Profile” screen (on iPad). This will act as a simulated patient chart.

- Students can view the tabbed content on the iPad (see below) prior to entering the patient's room and throughout the simulation as needed.

PATIENT PROFILE

Contains patient profile information as described above.

VITALS

- The iPad shows the “enterable” vitals screen.
 - If values are entered, they are checked for accuracy against following values (+/- 5): HR 68, RR 15, BP 188/94, Temp 37.4, O2 sat 100% on RA, Pain 2/10

PROBLEM LIST

Problem List

Currently Known Medical Problem(s)

1. Chronic Heart Failure, NYHA Class 2
2. Coronary Artery Disease
3. Diabetes Type 2
4. Chronic Kidney Disease, G3a
5. Obstructive Sleep Apnea
6. Hypertension
7. Osteoarthritis
8. Tinea pedis, recurrent
9. Gastroesophageal Reflux
10. Allergies, seasonal

CURRENT MEDICATION LIST

Facilitator Note:

This is an enterable form for students to use to enter medication information. QR codes for various medications are provided above to simulate medication bottles. By typing the first few letters in the box labelled “Medication,” a list of possible medications and dosages appear for the student to tap to select. The instructions/prescription for how to take the medication can be entered in the box labelled “Notes,” then tap Submit. The medication will appear in the list,

with a hyperlink provided to read more about the medication. Students may also tap “Discontinue” to remove the medication from the list.

Metoprolol Succinate and Tartate are both drop-down options to stimulate discussion about the difference between the two medications.

Medication <input type="text"/>	Notes <input type="text"/>	<input type="button" value="Submit"/>
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Current Medication	Daily Med Link	Notes	Edit
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PATIENT EDUCATION

See Appendix A for Patient Education handouts

EMERGENCY CONTACT INFORMATION

Emergency Contact Information

Contact	Contact Information
Wife: Maria Fernandez	Phone: 555-555-0156 Address: 220 South Main Street Anytown, WI

LEVEL

When the Level 1 tab is tapped, the iPad reads, “The iPad is at Level 1.”

SCANNER

Use this to scan available QR codes.

EXIT

The iPad reads, “Are you sure you want to exit? All data will be lost,” until the **QR code: Facilitator** code is scanned indicating all expected behaviors having been met.

- If “No” is selected, the iPad will return to the tabbed content.

- If “Yes” is selected, the iPad will let the student(s) exit and prompt them to complete an embedded 3-5 minute survey.

STATE 1

OBTAIN PATIENT INFORMATION

- Patient Overview
 - Patient is returning to the clinic for a follow-up visit for chronic heart failure. He brought all the medications he has been taking in a Ziploc bag.
- Expected Student Behaviors
 - Introduce themselves to the patient
 - Verify patient identity with name and date of birth
 - Obtain a focused patient history
 - Communicate therapeutically regarding patient concerns
 - Obtain vital signs accurately (see correct vitals listed under Vitals tab.)
 - Scan **QR Codes** for various medications above to simulate medication bottles. Enter medications and instructions accurately into medication record. (See actual medications listed above under Patient Supplies.)
 - Communicate their findings to the provider using correct medical terminology
 - Coach patients regarding treatment plan for heart failure using Patient Education handouts
 - Coach patient regarding standard pulmonary hygiene precautions
- Technician Prompts
 - Patient brought his medications in, but does not understand what they are for, or how to take them as prescribed. There is somewhat of a language barrier since his primary language spoken is Spanish. He can speak English, but does not understand medical “lingo.”
 - Initial patient responses can include:
 - “They told me I have a failing heart... But I don’t know what that means.”
 - “When I feel short of breath, I take all of the medicine in this bag. On days I feel well, I don’t take anything.”

- If students try to simulate obtaining the patient's weight, tell them "the scale reads 200 pounds," and ask them to convert it to kilograms.
- If students ask the following questions, provide these responses:
 - Do you feel short of breath today?
 - Answer: "A little."
 - Do you have a cough?
 - Answer: "Yes, sometimes."
 - Is your cough productive?
 - "I don't understand what 'productive' means."
 - Do you bring up anything when you cough?
 - "Yes, sometimes."
 - What does it look like?
 - "White and ... what word do you use... frothy."
 - Do you take any other medications?
 - "When I have pain and it won't go away with this medication, my wife gives me one of her pain pills."
 - Do you know what medication your wife gives you?
 - "No. It is "poquito" and white."
 - Do you smoke?
 - "Yes."
 - Does anyone in your household smoke?
 - "Yes, my wife does."
 - How much alcohol do you drink?
 - "A couple every day when I get home from work."
 - Do you watch how much cholesterol, fat and salt you eat?
 - "I'm not sure, I just eat what my wife gives me."
 - What kind of food do you generally eat every day?

- “Coffee and eggs, tortillas, burritos and refried beans.”
- Possible Facilitator Questions
 - What are general topics to address when providing care for a patient with heart failure?
 - How will you modify your approach for someone who does not speak English as their primary language?
 - What coaching is important to provide patients for with heart failure for self-management of their condition at home?
 - What is the difference between Metoprolol succinate and Metoprolol tartrate? Can they be used interchangeably?
 - What coaching is important to provide the patient regarding standard pulmonary hygiene precautions?

EXIT

After the **QR Code: Facilitator** code is scanned, indicating all expected behaviors have been met, the message will read, “Scenario objectives have been met. You may exit at any time.”

DEBRIEF

Nothing needed from the iPad.

QUESTIONS

1. Reaction: How do you feel this scenario went? (Allow students to vent their emotional reactions before delving into learning objectives.)
2. Review understanding of learning objectives: Demonstrate professionalism in a healthcare setting
 - a. How did you professionally manage the patient visit when there may be a language barrier?
3. Review understanding of learning objectives: Practice standard precautions
 - a. Describe the standard precautions you used while caring for Mr. Fernandez, including hygiene after touching the used tissue.
4. Review understanding of learning objectives: Obtain vital signs
 - a. Review the vital signs you obtained for Mr. Fernandez. Are these within normal limits for a 62-year-old male?
5. Review understanding of learning objectives: Obtain patient history
 - a. What kind of health history questions are important to review with a patient with heart failure?
6. Review understanding of learning objectives: Employ elements of therapeutic communication based upon theories of psychology
 - a. Did Mr. Fernandez exhibit any “cues” that indicated you should utilize some therapeutic communication?
 - b. How did you respond to his concerns? Was it effective?
 - c. If you could “do over” while communicating with Mr. Fernandez, is there anything you would do differently?
7. Review understanding of learning objectives: Assist physician with patient care: routine examinations
 - a. When assisting with patient care of a patient with heart failure, what data is especially important to be obtained?
8. Review understanding of learning objectives: Coach patients regarding: treatment plan

- a. Describe the handout that you reviewed with a patient with heart failure. What are some important topics to emphasize for self-management of this condition?
9. Summarize/Take Away Points:
 - a. “In this scenario you assisted in caring for a Hispanic male patient with chronic heart failure. What is one thing you learned from participating in this scenario that you will take into your nursing practice?” (Ask each student to share something unique from what the other students share.)

NOTE: Debriefing technique is based on INASCL Standard for Debriefing and NLN Theory-Based Debriefing by Dreifuerst.

SURVEY

Print this page and provide to students.

Students, please complete a brief (2-3 minute) survey regarding your experience with this ARISE simulation. There are two options:

1. Use QR Code: Survey
 - a. Note: You will need to download a QR Code reader/scanner onto your own device (smartphone or tablet). There are multiple free scanner apps available for both Android and Apple devices from the app store.
 - b. This QR Code will not work in the ARIS app.



2. Copy and paste the following survey link into your browser:
 - a. https://ircvtc.co1.qualtrics.com/SE/?SID=SV_6Mwfv98ShBfRnBX

APPENDIX A: HEART FAILURE PATIENT EDUCATION HANDOUT

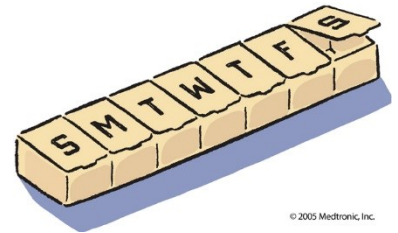
What Can I Do to Manage Heart Failure?

Although heart failure cannot be cured, it can be managed well. Your treatment plan may include medicines, surgery, implantable medical devices, or a combination of these approaches. There are also a lot of things you can do to help improve your condition. Together with proper medical care and careful monitoring, good self-care can help you feel better, stay out of the hospital, and live a longer life.

To manage your heart failure, it is best if you do the following:

Take your medicines regularly as prescribed by your doctor.

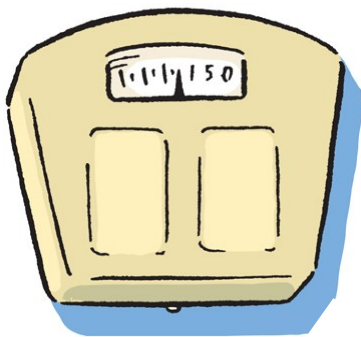
When the medicines that your doctor has prescribed are taken regularly and at the correct doses, they can make you feel better, reduce hospitalizations, and help you live longer. Experts in heart failure call many of these medicines “lifesaving.” Since your medication is very important, when traveling, keep your medication



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in your carry-on luggage and bring it with you on the plane. It is helpful to keep your medicine organized, and remember to refill your prescriptions before you travel so that they do not run out.

Weigh yourself every day and write it down.



Daily changes in weight are usually the result of water weight. By weighing yourself every day at the same time, you can help monitor whether your body is retaining fluid due to heart failure. Even though you may feel the same, a gain of just 3 to 4 pounds over a few days is a sign of worsening congestion that must be treated. If treated, your heart and lungs can function more easily and you may feel more comfortable. If left untreated, it may become more serious and require hospitalization.

Follow a low-sodium (low-salt) diet.

Heart failure can cause your body to retain sodium and result in fluid buildup. The extra fluid makes your heart work harder and your symptoms get worse.

A low-sodium diet generally means that you eat no more than about 2,000 milligrams (mg) of sodium per day. That amount is less than 1 teaspoon of salt from all sources, including the salt that is already in your food.

To reduce the sodium in your diet, stop adding additional salt to your food. Avoid processed foods –especially canned, boxed, or bagged foods – and eat more fresh vegetables and fruit. Be sure to review the nutritional information labels on all packaged foods for sodium content, and decrease the total amount of salt you eat per day. Pay close attention when eating at restaurants. Many restaurants will tell you nutritional information of foods if you ask. They will hold salt when cooking if you ask and will serve salad dressing and sauces/gravies on the side. Also pay attention to certain foods that contain a large amount of water, such as head lettuce or watermelon. Although following a low- sodium diet might be a challenge, by following the diet recommended by your doctor or nurse you will gain better control of your condition.



Get regular physical activity.

Heart failure can make you feel tired. One of the ways to feel better is to keep physically active through a regular exercise program. In general, start slowly and increase your exercise gradually. Talk to your doctor about an exercise program that is best for you. Exercise can be a highly valuable plan to improve your condition.

Quit smoking.

Quitting smoking is one of the best things you can do for your heart and overall health. Smoking damages your blood vessels, increases your blood pressure, and causes lung disease in addition to other problems. Quitting smoking is strongly recommended for all people with heart disease, including heart failure. Talk to your doctor or nurse about new methods for helping people quit smoking.



Stay connected socially.



Your family and friends can help. Don't keep your condition a secret. Let your family and friends support you and help you stay with your treatment plan. Having an active social life can also help keep your mind off your problems and give you a more positive outlook on life. Participating in activities that you enjoy reminds you of why you want to take good care of yourself and stay healthy. Plan some fun activities that will reduce stress and give you energy.

Monitor your symptoms daily and learn when to call your doctor.

You know your heart failure symptoms best. Write down when you notice your symptoms are getting better or worse, or when you develop new symptoms. This information can help alert you as to when you should call your doctor and can also help your doctor make changes to your treatment.

Feel free to ask your doctor and nurse any questions you might have about your treatment plan.



Adapted by the SCA Prevention Medical Advisory Team from the IMPROVE HF registry toolkit. This material is intended to be educational. It is not intended to replace the information provided to you by your healthcare providers and may not be directly applicable for your individual clinical circumstance.

Please refer to the manufacturers' prescribing information and/or instructions for use for the indications, contraindications, warnings, and precautions associated with the medications and devices referenced in these materials.

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CREDITS

Heart Failure Patient Education handout from American Heart Association, Get with the Guidelines HF Clinical Tools Library. Downloaded from http://www.heart.org/HEARTORG/Professional/GetWithTheGuidelines/GetWithTheGuidelines-HF/Get-With-The-Guidelines-HF-Clinical-Tools-Library_UCM_305817_Article.jsp#.WVZ7a03fPIU

Medication information from National Library of Medicine: Daily Med at <http://dailymed.nlm.nih.gov/dailymed/>

Picture of edema from Wikipedia at <https://en.wikipedia.org/wiki/Edema>

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