

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 male patient with chronic stable heart failure. He was just admitted to the skilled nursing facility yesterday from home, due to increasing weakness that has resulted in several recent falls. Abnormal lab results arrive at the start of shift that should be assessed before medications are administered. Students should notify the provider of their concerns. In State 2, new orders are received.

LEARNING OBJECTIVES

1. Perform a focused physical assessment on a patient with chronic heart failure
2. Assess cardiac-related lab results
3. Administer cardiac related medications safely
4. Develop a nursing plan of care for a patient newly admitted to a skilled nursing facility
5. Communicate therapeutically with a patient newly admitted to a skilled nursing facility
6. Report complete, accurate and pertinent information to the health care team

CURRICULUM MAPPING

WTCS NURSING PROGRAM OUTCOMES

- Implement one's role as a nurse in ways that reflect integrity, responsibility, ethical practices, and an evolving professional identity as a nurse committed to evidence-based practice, caring, advocacy and quality care
- Demonstrate appropriate written, verbal, and nonverbal communication in a variety of clinical contexts
- Integrate social, mathematical, and physical sciences, pharmacology, and pathophysiology in clinical decision making
- Provide patient centered care by utilizing the nursing process across diverse populations and health care settings
- Minimize risk of harm to patients, members of the healthcare team and self through safe individual performance and participation in system effectiveness
- Lead the multidisciplinary health care team to provide effective patient care throughout the lifespan
- Use information and technology to communicate, manage data, mitigate error, and support decision-making

BASIC SKILLS

- Obtain a health history
- Perform a general survey assessment

- Measure blood pressure and other vital signs
- Perform a basic respiratory assessment
- Perform a basic cardiovascular assessment

NURSING FUNDAMENTALS

- Maintain a safe, effective care environment for adults of all ages
- Use appropriate communication techniques
- Use the nursing process
- Provide nursing care for patients with alterations in oxygenation
- Adapt nursing practice to meet the needs of diverse patients in a variety of settings

PHARMACOLOGY

- Apply components of the nursing process to the administration of cardiovascular and renal systems drugs

NURSING HEALTH ALTERATIONS

- Plan nursing care for patients with alterations in the cardiovascular system

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: English

EQUIPMENT/SUPPLIES/SETTINGS

Environment

- Skilled nursing facility room

Patient

- Street clothes: sweatpants, white T-shirt
- QR codes in various anatomical locations on chest and on leg

Monitor Settings

- Vitals: HR 54, RR 16, BP 100/68, Temp 37, O2 Sat 95% on RA, Pain 0/10

Supplies

- Equipment to obtain vitals including oxygen saturation

Medications

- QR codes are available below for the following PO medications:
 - Aspirin enteric coated 81mg PO
 - Digoxin 0.25 mg PO
 - Furosemide 40mg PO
 - Metoprolol 12.5 mg PO
 - Lisinopril 5 mg PO (note: dose ordered is 10 mg)

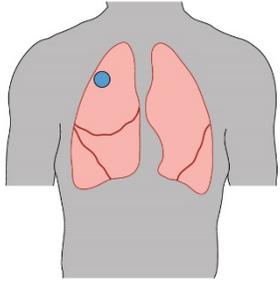
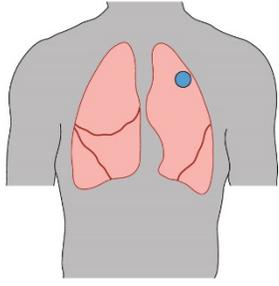
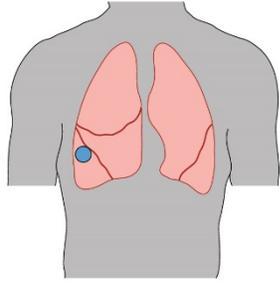
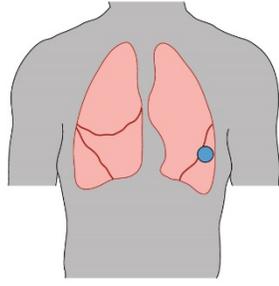
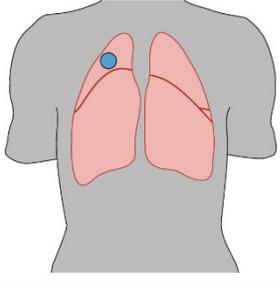
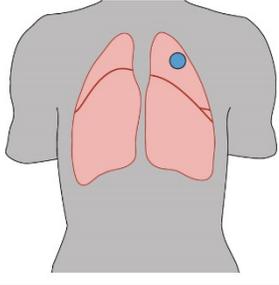
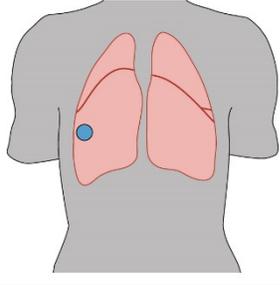
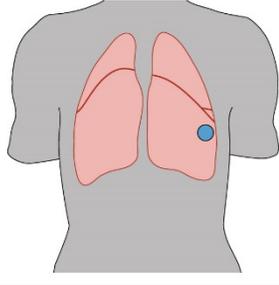
- Atorvastatin 40 mg PO
- Acetaminophen 500 mg PO (note: 2 tabs are ordered)

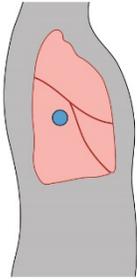
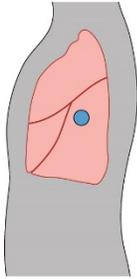
QR CODES

REPORT 	PATIENT 	LEG 	FACILITATOR 
HEART 	ASPIRIN 	DIGOXIN 	FUROSEMIDE 
LISINOPRIL 	METOPROLOL 	POTASSIUM 	ACETAMINOPHEN 
PATIENT EDUCATION 	ATORVASTATIN 	PATIENT ID 	

CHEST QR CODES

Cut along the dotted lines to create a folded QR code for each anatomical location. Fold each section along the solid line to create a bi-fold of the diagram and QR code, then apply to the simulator in the appropriate anatomical location.

			
ANTERIOR 2	ANTERIOR 3	ANTERIOR 6	ANTERIOR 7
			
			
POSTERIOR 0	POSTERIOR 1	POSTERIOR 4	POSTERIOR 5
			

	
RIGHT AXILLARY 1	LEFT AXILLARY 1
	

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.
 - Describe how a QR Code sound will work in the scenario. For the most authentic sound experience, student should use ear buds or the ARISE “stethoscope” for all QR Codes with the following symbol: □. Example: **QR Code: Chest Anterior 1** □
 - Medication Hyperlinks – Medications are underlined and hyperlinked to DailyMed, which is a medication reference housed by the National Library of Medicine. Students can click on these links during the simulation for up-to-date medication content, labels, and package insert information.
- Discuss the simulation “Learning Objective(s)” (on iPad) as well as any other Prebrief materials
- Get “Report” on iPad
 - Possible Facilitator Question
 - What are your clinical concerns based on the report your received?
- Play the “Patient” video on iPad
 - Possible Facilitator Question
 - What are your priority concerns after meeting the patient?
- Review initial tabbed content

HISTORY AND PHYSICAL

See H&P in Appendix A

ORDERS

Provider Orders

Date	Time	Order
Yesterday	1430	Admit to Virtual Skilled Nursing Facility
		CBC, Chem 7 and every 3 months
		Administer O2 via nasal cannula to maintain pulse oximetry 95% or greater
		Notify MD if O2 sat < 90% with oxygen
		Cardiac diet: 2g sodium, low cholesterol, low fat
		Weight on admission and weekly weights
		Physical therapy consult
		Aspirin enteric coated 81mg one tab PO every day
		Digoxin 0.25 mg PO daily
		Furosemide 40mg PO every 12 hours
		Metoprolol 12.5 mg PO daily
		Lisinopril 10mg PO daily
		Atorvastatin 40 mg PO daily
		Acetaminophen 500 mg PO 2 tabs every 4 hours for pain or fever PRN
		TED hose on while awake
		Elevate legs three times daily
		---- Dr. M. Cordoba, M.D

MAR

Medication Administration Record

Scheduled		
Aspirin enteric coated 81 mg PO once daily	Scheduled Time	Last Given
	0800	
Digoxin 0.25 mg PO once daily	Scheduled Time	Last Given
	0800	
Furosemide 40 mg PO once daily	Scheduled Time	Last Given
	0800	
Metoprolol 12.5 mg PO once daily	Scheduled Time	Last Given
	0800	
Lisinopril 10 mg PO once daily	Scheduled Time	Last Given
	0800	
Atorvastatin 40 mg PO once daily	Scheduled Time	Last Given
	2100	
PRN		
Acetaminophen 500 mg PO 2 tabs every 4 hours for pain or fever PRN	Last Given	

NURSING | LEVEL: 2

DAILY RECORD

- Entries displayed from vital signs taken on admission: HR 58, RR 18, BP 158/100, Temp 37.5, O2 Sat 95% on RA, Pain 1/10

VITAL SIGNS

- Screen is open for entry
- Facilitator note: Simulator vitals set to: HR 54, RR 16, BP 100/68, Temp 37, O2 Sat 95% on RA, Pain 0/10

PROGRESS NOTES

Progress Notes

Date/Time	Note
Yesterday/ 1630 Nursing Note	<p>Patient admitted from home in stable condition as a direct admit from primary care physician. See admitting H&P and new orders. Home medications were reconciled and information sent to pharmacy. Maria, his wife, reports that he has had frequent falls at home over the past month and often reports that his “legs go out from under him.” Vital signs: BP 149/88, HR 72, RR 18, Temp 37.5 C, O2 sats 98%. Patient and wife oriented to facility and both verbalize understanding of safety precautions for fall prevention. Admitting nurse to complete a full assessment tomorrow morning and develop a nursing plan of care.</p> <p>----- Nancy Smith, RN</p>

LAB/DIAGNOSTICS

Laboratory Results

CBC with Differential			
	Today @ 0600	Units	Reference Range
WBC	8.0	x10 ³ uL	F: 4.7-10.3/M: 4.5-10.5
RBC	4.1	x10 ⁶ uL	F: 4.0-4.9/M: 4.0-4.9
Hgb	10.3	g/dL	F:10.9-13.3/M:11.0-13.3
HCT	30.3	%	F: 33.0-39.6/M: 32.7-39.3
MCV	74.2	fL	F: 78.5-90.4/M: 76.5-90.6
MCH	30	pg	25-33
MCHC	32	g/dL	31-37
RDW	12.3	%	F: 11.6-13.4/M: 12.0-14.0
Platelet	223	x10 ⁹ uL	F: 183-368/M: 194-364
MPV	8.4		7.4-10.4
Neutro	48		38-68
Lymph	45		25-54
Mono	0.7		0.- 0.8

Eos	3		1-5
Baso	1		0-2

Chem 7			
	Today @ 0600	Units	Reference Range
Glucose	100	mg/dL	Fasting 70-150
BUN	30	mg/dL	10-25
Creatinine	1.6	mg/dL	F: 0.4-1.4/M: 0.5-1.5
Sodium	145	mEq/L	135-145
Potassium	3.3	mEq/L	3.5-5.3
Chloride	100	mEq/L	98-108
Carbon Dioxide	25	mEq/L	23-27

PATIENT EDUCATION

A patient education handout on heart failure is available here and a printable version is also available in Appendix B.

LEVEL

The State level is displayed.

SCANNER

Students tap this tab to scan various QR codes within the scenario.

EXIT

The iPad reads, "Are you sure you want to exit? All data will be lost."

- 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

PATIENT ASSESSMENT

- Patient Overview
 - Patient was just admitted to a skilled nursing facility yesterday due to increasing weakness with several falls at home. He is discouraged with his symptoms of worsening fatigue, palpitations, lack of appetite, bloating and no bowel movement for a few days. He feels that he is worse and states he “just wants to go home.” Students should assess the patient and review the newly received lab results before administering medications.
- Expected Student Behaviors
 - Introduce themselves to the patient
 - Verify patient identity with name and date of birth
 - Communicate therapeutically regarding patient concerns
 - Obtain vital signs and accurately enter them accurately in iPad
 - These are not verified against any settings within the iPad.
 - Perform a general survey assessment on primary concerns
 - Perform a focused respiratory assessment by scanning **QR Code: Chest**
 - at various anatomical locations on anterior, medial and posterior chest
 - Facilitator Note: Fine crackles can be auscultated in the lower posterior bases. Lung sounds are normal in the other lobes.
 - Perform a focused cardiac assessment by scanning **QR Code: Heart** □
 - Facilitator Note: An S3 sound is auscultated. For best sound quality, students should use headphones.
 - Perform a focused lower extremity assessment for edema by scanning **QR Code: Leg**
 - Facilitator Note: Pitting edema is present
 - Review lab results before administering cardiac medications
 - Implement other provider orders such as apply TED hose, elevate legs, ensure cardiac diet on meal tray
 - Initiate fall precautions before leaving the patient room.

- Notify the provider of abnormal lab results using SBAR format
- Technician Prompts
 - Patient is feeling discouraged and does not like being in the nursing home. He has worsening fatigue, palpitations, lack of appetite, bloating and no bowel movement for a few days.
 - Initial patient responses can include:
 - “Why am I so tired?”
 - “When I walk to the bathroom, I have to stop to catch my breath.”
 - “Every so often, it feels like my heart is skipping a beat.”
 - “My legs are puffy.”
 - “I feel bloated.”
 - “I’m not hungry.”
 - If students ask: “I haven’t had a bowel movement in about 3 days.”
 - “How long will I have to be in the nursing home?”
 - “I am worse since I got here.”
 - “I just want to go home.”
 - When role-playing the physician, the students should provide information to you in SBAR format. If they don’t, ask appropriate questions, then relay the new orders as listed in State 2:
 - Potassium 20 mEq powder packet for oral solution x 2 packets PO STAT and daily
 - Hold digoxin dose today
 - Digoxin level and potassium level in the morning
- Suggested Facilitator Questions:
 - What information from the H&P is relevant to your nursing care?
 - Describe your assessment findings.
 - What nursing problems have you identified during your assessment?
 - Relate medications on the MAR to Hector’s health conditions.
 - Relate Hector’s symptoms to his lab results.

- How will you report your concerns to the provider?
- Tabbed iPad Prompts & Content Changes
 - Students will level up to State 2 after they have scanned the **QR Code: Facilitator**, indicating they have performed the Expected Behaviors and notified the provider of their concerns.

STATE 2

NEW ORDERS RECEIVED

- Patient Overview
 - New orders are received for potassium replacement therapy and to “hold” the dose of digoxin.
- Expected Student Behaviors
 - Appropriately administer medications by first asking patient his name and DOB then scanning appropriate medication **QR Codes**.
 - Explain potassium replacement therapy to patient. Scan **QR Code: Potassium PO** and administer the medication.
 - May perform patient education on heart failure using the handout provided under the Patient Education tab
 - Reinforce fall precautions with patient before leaving the room
- Technician Prompts
 - Patient is concerned about his abnormal lab results and wants more information.
 - Initial patient responses can include:
 - “Why is my potassium level so low?”
 - “Is this why I have been so weak?”
 - “I think I’ll just stop taking the furosemide. It makes me have to go to the bathroom all the time!”
 - “I don’t like using the call light every time I have to go to the bathroom.”
 - “Will this medication help me to have a bowel movement?”
- Facilitator Questions
 - What could be the cause of Mr. Fernandez’s hypokalemia?
 - Outline fall precautions for Mr. Fernandez.
 - Outline planned nursing interventions for the nursing problems you have identified today.

- Why did the provider hold the Digoxin?
- Tabbed iPad Prompts & Content Changes
 - Students may exit after completing Expected Behaviors and scanning **QR Code: Potassium**

ORDERS

Provider Orders

Date	Time	Order
Yesterday	1430	Admit to Virtual Skilled Nursing Facility
		CBC, Chem 7 and every 3 months
		Administer O2 via nasal cannula to maintain pulse oximetry 95% or greater
		Notify MD if O2 sat < 90% with oxygen
		Cardiac diet: 2g sodium, low cholesterol, low fat
		Weight on admission and weekly weights
		Physical therapy consult
		Aspirin enteric coated 81mg one tab PO every day
		Digoxin 0.25 mg PO daily
		Furosemide 40mg PO every 12 hours
		Metoprolol 12.5 mg PO daily
		Lisinopril 10mg PO daily
		Atorvastatin 40 mg PO daily
		Acetaminophen 500 mg PO 2 tabs every 4 hours for pain or fever PRN
		TED hose on while awake
		Elevate legs three times daily

Today	Now	Potassium 20 mEq powder packet for oral solution x 2 packets PO STAT and daily
		Hold digoxin dose today
		Digoxin level and potassium level in the morning

MAR

Medication Administration Record

Scheduled		
Aspirin enteric coated 81 mg PO once daily	Scheduled Time	Last Given
	0800	
Digoxin 0.25 mg PO once daily	Scheduled Time	Last Given
	0800 -HOLD TODAY	
Furosemide 40 mg PO once daily	Scheduled Time	Last Given
	0800	
Metoprolol 12.5 mg PO once daily	Scheduled Time	Last Given
	0800	
Lisinopril 10 mg PO once daily	Scheduled Time	Last Given
	0800	
Potassium 20 mEq powder packet for oral solution x 2 packets PO STAT and daily	Scheduled Time	Last Given
	STAT	
Atorvastatin 40 mg PO once daily	Scheduled Time	Last Given
	2100	
PRN		
Acetaminophen 500 mg PO 2 tabs every 4 hours for pain or fever PRN	Last Given	

NURSING | LEVEL: 2

DEBRIEF

SUGGESTED 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 objective: Perform a focused physical assessment on a patient with chronic heart failure
 - a. What did you discover on your assessment of Mr. Fernandez that was related to heart failure?
3. Review understanding of learning objective: Assess cardiac-related lab results
 - a. How did Mr. Fernandez’s lab results relate to his current medications and his condition of heart failure?
 - b. What symptoms were related to hypokalemia?
4. Review understanding of learning objective: Administer cardiac related medications safely
 - a. For each medication: discuss mechanism of action, indications, associated pre-assessments and monitoring.
5. Review understanding of learning objective: Communicate therapeutically with a patient newly admitted to a skilled nursing facility
 - a. How did you address Mr. Fernandez’s desire to go home? Was it effective?
6. Review understanding of learning objective: Report complete, accurate and pertinent information to the health care team
 - a. What information was important to communicate to the provider?
 - b. As a group, create a “best response” SBAR report for the provider.
 - c. What information is important to communicate to the C.N.A. for patient safety?
7. Tie the scenario to learning objective: Develop a nursing plan of care for a patient newly admitted to a skilled nursing facility
 - a. Identify three priority nursing problems you identified.
 - b. Create a patient centered goal for each nursing problem you identified.
 - c. Discuss focused assessments for each nursing problem.

- d. Discuss nursing interventions for each nursing diagnosis.
 - e. Re-evaluate the simulation in terms of the nursing process; what was actually accomplished? What could be improved in the future?
8. Summarize/Take Away Points: “In this scenario you assessed a patient with chronic heart failure who was recently admitted to a skilled nursing facility with increasing weakness. 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: H&P

Patient Name	DOB	MR#
Hector Fernandez	9/06/19XX	41219
Allergies	Height (cm)	Admission Weight (kg)
Penicillin (hives)	175	86.4

History and Physical

DATE: Yesterday

ADMITTED TO: Virtual Skilled Nursing Facility

CHIEF COMPLAINT: Weakness and frequent falls at home

HISTORY OF PRESENT ILLNESS: Mr. Fernandez is a 62 y/o male is being admitted to the skilled nursing facility for strengthening and rehabilitation. He was diagnosed with heart failure 10 years ago that has been managed with his current medications. Currently he is classified as NYHA Class II. However, his wife reports he has had several falls at home due to increasing fatigue and weakness.

Mr. Fernandez describes no other associated symptoms during these episodes of weakness, including chest pain, dizziness, or palpitations.

PAST MEDICAL/SURGICAL HISTORY: Diagnosed with a long-standing history of heart failure, hyperlipidemia, and hypertension.

ER/HOSPITALIZATIONS IN THE LAST 12 MONTHS: None

MEDICATIONS: Current medications at home include: Aspirin 81 mg daily, Digoxin 0.25 mg daily, Lisinopril 10 mg daily, Metoprolol 12.5 mg daily, Atorvastatin 40 mg daily, Furosemide 40 mg twice daily and Tylenol as needed for pain.

ALLERGIES: No know allergies

SOCIAL HISTORY: Mr. Fernandez is a pleasant 62-year-old gentleman who has lived with his 55-year-old wife in his home for the past 35 years. He is a retired veteran who served in the Army for 30 years. He remains active with cooking, gardening, and doing other activities. He has two sons who live out of state and a grandson who lives in the area. His religious preference is Catholic and he occasionally attends services at St. Andrew's.

Mr. Fernandez denies any history of tobacco use. Mr. Fernandez also states that he occasionally has a glass of beer with dinner and otherwise drinks alcohol socially on rare occasion. He denies illegal drug use and occasionally takes OTC acetaminophen for arthritic pain.

REVIEW OF SYSTEMS:

GENERAL: Has had increased weakness and fatigue over past several months to the point where he can't complete his normal daily activities and has experienced several falls.

HEENT: Wears reading glasses and otherwise unremarkable. No complaints of headache change in vision, nose or ear problems, or sore throat.

Respiratory: Denies increased shortness of breath. Reports occasional cough of clear sputum.

Cardiovascular: Denies chest pain. Has chronic edema in both feet and legs for which he occasionally wears TED hose at home.

Peripheral Vascular: Denies claudication, leg cramps, paresthesias or edema.

Gastrointestinal: No complaints of nausea, vomiting or diarrhea. No complaints of dysphagia, nausea, vomiting, or change in stool pattern, consistency, or color.

Genitourinal: No complaints of dysuria, hematuria. Does have difficulty starting stream with some dribbling. Generally has nocturia x 3.

Musculoskeletal: He complains of lower back pain after working in his garden and daily joint pain which worsens before it rains. This pain is usually relieved with Tylenol. He complains of no other muscle aches or pains. He complains of increasing fatigue and weakness that has prevented him from gardening over the past few months, and has fallen five times at home without major injury. He states when he falls "my legs just go out from under me."

Neurological: Denies numbness and tingling in extremities.

PHYSICAL EXAM:

Vital signs: Blood Pressure: 158/100, Pulse: 58, Respirations:18, Temperature:37.5 degrees Celsius, O2 sat 95%

height= 185 cm (6'2), weight= 109 kg

Pain Scale 2/10

General Appearance: 62-year-old male who appears stated age and is well developed, well hydrated, and well nourished. Maintains eye contact and interacts appropriately. Is alert and oriented x 3 and cooperative but fatigued.

HEENT: Pupils equally round, 4mm, reactive to light and accommodation, sclera and conjunctiva normal. Fundoscopic examination reveals normal vessels without hemorrhage.

Tympanic membranes and external auditory canals within normal limits.

Oral pharynx without erythema or exudates. Tongue and gums are within normal limits.

Neck is easily movable without resistance. No abnormal adenopathy in the cervical or supraclavicular areas. Trachea is midline and thyroid gland is without masses. No carotid bruit auscultated.

Integument: Normal turgor. Skin is warm and dry with no cyanosis present.

Respiratory/Chest: Fine crackles are auscultated bilaterally in posterior bases. No accessory muscle use. Minimal effort. No cyanosis or clubbing.

Cardiovascular: Normal S1S2 without extra sounds. PMI is in the 6th inter-costal space at the lateral line.

Vascular/extremities: Posterior tibial pulses – L 1/4 / R 1/4 Capillary refill less than three seconds. Extremities warm and pink. Lower extremity pedal edema 3+ bilaterally.

Gastrointestinal/abdomen: The abdomen is symmetrical without distention; bowel sounds are normal in quality and intensity in all areas. No masses or splenomegaly are noted.

Genitourinary: No CVA tenderness.

Neurological: Cranial nerves II – XII are within normal limits. Motor ability, sensation and reflexes of the upper and lower extremities are within normal limits. Gait is wide based but otherwise steady.

ASSESSMENT/PLAN:

1. Admit to Skilled Nursing Facility for physical therapy and strengthening.
2. Administer O2 via nasal cannula PRN to maintain pulse oximetry at 95% or greater (notify health care provider if cannot maintain O2 sat >90%)
3. Continue current home medications as listed above.

4. Physical therapy consult for strengthening.
5. Cardiac Diet: 2 g sodium, low fat, low cholesterol
6. TED hose on while awake; elevate legs three times daily
7. CBC, Chem 7 now and every 3 months.
8. Weight on admission and weekly weights.

Electronically signed by: Dr. M. Cordoba, M.D.

APPENDIX B: PATIENT EDUCATION HANDOUT ON HEART FAILURE

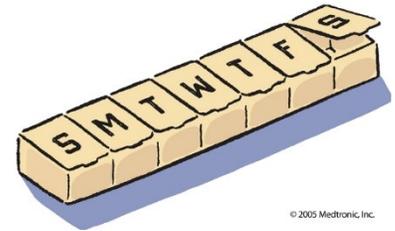
What Can I Do to Manage Heart Failure?

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.

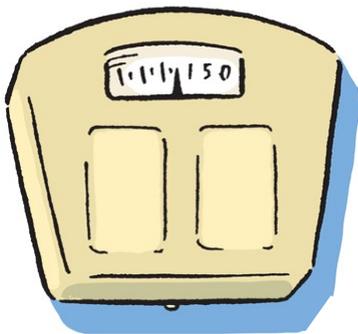
When the medicines that your doctor has prescribed are taken regularly and at the correct doses, they can make you feel better, reduce hospitalizations, and help you live longer. Experts in heart failure call many of these medicines “lifesaving.” Since your medication is very important, when traveling,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

Heart and Lung sounds from Thinklabs Medical, LLC, Centennial, CO at <http://www.thinklabs.com/lung-sounds>

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

REFERENCES

- American Heart Association (2016). Get with the Guidelines: Heart Failure. Downloaded from http://www.heart.org/HEARTORG/Professional/GetWithTheGuidelinesHFStroke/Get-With-The-Guidelines---HFStroke_UCM_001099_SubHomePage.jsp
- Dreifuerst, Kristina Thomas (2012). Using debriefing for meaningful learning to foster development of clinical reasoning in simulation. *Journal of Nursing Education*, 51(6), 326-333. doi:<http://dx.doi.org/10.3928/01484834-20120409-02>
- International Nursing Association for Clinical Simulation and Learning. (2013). Standards of best practice: simulation. Retrieved from: <http://www.inacsl.org/files/journal/Complete%202013%20Standards.pdf>
- Stella, L. (2013). Understanding Measures for Heart Failure Treatment, *American Nurse Today*, 8(2). Downloaded from: <https://americannursetoday.com/understanding-core-measures-for-heart-failure-treatment/>



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