# **Telehealth Heart Failure Center Presenting**

#### 1. SCOPE

1.1. Marshfield Clinic Health SystemTelehealth presenter

## 2. DEFINITIONS & EXPLANATIONS OF TERMS

- 2.1. Abbreviations
  - AVS: After Visit Summary
  - EHR: Electronic Health Record
- 2.2. Definitions
  - Telehealth presenter: Clinical staff presenting patient to Marshfield Clinic provider. This may be a Registered Nurse, Licensed Practical Nurse, or Medical Assistant
  - Pulses: 3+= bounding, hyperkinetic, 2+= normal, 1+= weak, thready, hypokinetic, 0= absent
  - Edema: 1+= slight pitting: no visible change in the shape of the leg (skin indents 2mm), 2+= somewhat deeper pitting; no marked change in the shape of the leg (skin indents 4mm), 3+= pitting is deep; leg is full and swollen (skin indents 6mm), 4+= pitting is very deep; leg is very swollen (skin indents 8mm +)
  - Aortic valve: is at the second right intercostal space at the sternal border
  - Pulmonic valve: is at the second left intercostal space at the sternal border
  - Secondary aortic: is at the third left intercostal space at the sternal border
  - Tricuspid valve: is at the fifth left intercostal space at the sternal border
  - Point of Maximal Impulse (PMI): is at the apex; fifth left intercostal space at the midclavicular line
  - Spiral bandaging: is the simplest of the roller bandaging techniques. While rolling the bandage, in this method, the turns are done in spiral method, where in each turn covers the two-third part of the preceding turn. Spiral technique of bandaging is most often used on body parts with uniform circumference, such as leg or forearm.
  - Vertigo: The sensation of moving around in space (subjective vertigo) or of having objects move about the person (objective vertigo). Vertigo is sometimes inaccurately used as a synonym for dizziness, lightheadedness, or giddiness. It may be caused by a variety of entities, including middle ear disease; toxic conditions such as those caused by salicylates, alcohol, or streptomycin; sunstroke; postural hypotension; or toxemia due to food poisoning or infectious diseases. (Taber's Online)

• Codec: refers to the clinical video conferencing device or software. Sometimes used interchangeably with Polycom

#### 3. PROCEDURE BODY

All clinical staff responsible for the presenting of patients to Heart Failure Center or any provider who may need a component of a cardiac history or physical exam will be proficient in providing cardiac exam while working within scope of practice via Telehealth technologies and shall be appropriately trained.

- 3.1. Pre-Consult Preparation
  - a. See <u>Core Telepresenting Procedure</u>. This procedure includes verifying medications, allergies, reason for visit
  - b. Have ace wraps available prior to consult to wrap legs if needed
  - c. You may have patient wear a gown if you are not able to work around existing clothing. Only need waist up, women can leave bra on
  - d. Exam may be conducted in chair or wheel chair if patient unable to get on exam table
  - e. Take patient's shoes and socks off for provider to assess edema
    - □ Unless patient has wound dressing, brace, or refuses due to difficulty
      - Let provider know
  - f. Complete vital signs to include:
    - □ weight
    - □ blood pressure
      - Refer to <u>Lippincott</u>
      - Refer to 3.2 for an initial visit
      - Refer to 3.4 for patients over 80 years of age
    - □ pulse
    - □ oxygen saturation
    - Enter results in dashboard under the vitals tab. Be sure to select the appropriate provider and the necessary package that coincides with the visit
  - g. You may need to fax food, salt, fluid or other records that the patient brings to the visit to the Heart Failure Center
  - h. Report the following weight gain/loss changes to the Heart Failure Clinic provider
    - □ 3 pound gain over night
    - □ 5 pound gain in 7 days

# □ 5 pound weight loss

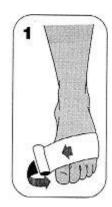
- 3.2. Initial Visit
  - a. During the initial visit or anytime requested by a provider the patient will receive a baseline set of blood pressures
  - b. Check a blood pressure on one arm, then check a blood pressure on the patient's other arm, unless contraindicated.
    - □ Record this in observations
      - Be sure to indicate which arm the blood pressure has been taken on
      - Indicate the arm with the higher blood pressure
      - For a blood pressure to be considered higher it must be greater than 10mmHg for the systolic or diastolic number. If this numerical difference does not exist, document the patient's dominant arm (the one they use for most things eating, writing, etc.) and use this in the future
  - c. See section 3.4 for patients greater than 80 years old
- 3.3. Follow-up visits to the Heart Failure Center
  - a. Following the initial visit, at each subsequent visit a patient's blood pressure will be taken on the arm that recorded the highest blood pressure during the initial visit
    - $\hfill\square$  Record this in observations
  - b. See section 3.4 for patients greater than 80 years old
- 3.4. Patients over 80 years of age
  - a. Patients over the age of 80 should have orthostatic blood pressures and heart rates measured <u>at all visits</u>. This will be done on the arm that has produced the highest blood pressure
    - After recording a sitting blood pressure ask the patient to stand
      - Wait 2 minutes
      - Have the patient rest their arm on top of the blood pressure machine to support arm while taking standing blood pressure
      - Take blood pressure and pulse
      - Record in observations
- 3.5. Directed Physical Assessment
  - a. Edema Assessment
    - $\hfill\square$  Look for swelling of the hands, feet, face, calves, and arms and note:
      - Is it unilateral or bilateral

- How far edema goes up
- If present, hold hand held video camera at 30 to 45 degree angle to show area with swelling and press on the area with swelling (ankles, mid-calf, etc.) for 10 seconds and release. You may check for edema from knee down, or feet up
  - Assess severity of Edema. (1-4+) pitting

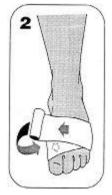




- Asses for weeping of fluid due to edema
- Patients may get so edematous that they will have a serous type drainage from little/almost pinhole openings in the legs
- Report findings to provider during visit
- If patient presents with aces wraps on lower extremities you may be requested by the Heart Failure Center provider to remove to accurately assess for edema. You will need to re-wrap extremity before patient leaves using a spiral bandaging technique
- Spiral bandaging is the simplest of the roller bandaging techniques. While rolling the bandage, in this method, the turns are done in spiral method, where in each turn covers the two-third part of the preceding turn. Spiral technique of bandaging is most often used on body parts with uniform circumference, such as leg or forearm
- Use a 4-6 inch ace bandage for the foot and lower leg. A 6-inch ace bandage might be best for adult thighs. You can also use the ace bandage that the patient came with. Start the ace wrap at the top of the foot, just below the toes. Wrap over the top of the foot and around the back of the foot. This will secure the ace bandage and prevent the ace bandage from riding up the leg



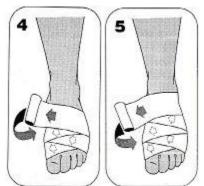
• Pull the ace wrap diagonally, not at a right angle to the leg



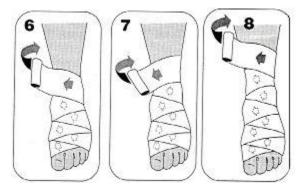
• Wrap up the foot diagonally, reversing the direction with each turn



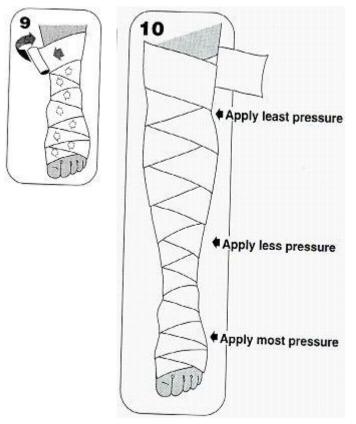
 Keep wrapping in a criss-cross pattern, adding the most pressure as you wrap up the foot, toward the ankle



 As you apply the ace wrap around the ankle, begin to move up the leg, using the same technique. Apply less and less pressure as you move up toward the body



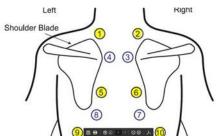
 Keep wrapping up the thigh and secure the end of the ace wrap with metal clips or tape. Check the toes to see if they are pink and warm. There should not be any numbness or tingling. If the toes become paler, cool, numb, or tingle, the ace bandage may be too tight. Remove and rewrap the ace bandage to apply correct pressure without cutting off the circulation (UW Health, 2012)



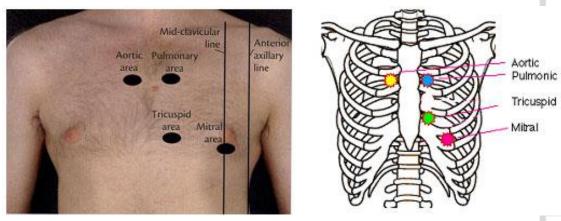
b. Lungs

Position patient so the posterior side is to the room camera. If patient is not
positioned so the provider can see placement of stethoscope, must
verbally state location

- Place limited pressure with the digital stethoscope at the six posterior lung fields for two complete inspirations and expirations. Watch the provider for cues to move to the next landmark
- Begin with upper lobes of lung, moving the diaphragm of the stethoscope in a ladder-like pattern, from one side to the other. This will allow the provider to identify patterns of breath sounds and compare symmetric areas of the lungs



- If provider requests anterior lung fields, position patient with anterior side facing the room camera. Use the digital stethoscope to auscultate two anterior lung fields
- c. Heart
  - With the patient's anterior side to the room camera, apply limited pressure to the digital stethoscope to auscultate. The Mitral valve can be heard best when placing the stethoscope between the mid-clavicular and axillary line.



- Aortic valve
- Pulmonic valve
- Tricuspid valve
- Point of Maximal Impulse (PMI)
- Watch the provider for cues to move to the next landmark.
- d. Abdominal exam: be prepared to use the room camera and hand held camera
  - Inspect abdomen

- Auscultate abdomen for bowel sounds in 2 different quadrants
- Place stethoscope on the abdomen and listen for 15 to 20 seconds, may need to repeat if unable to hear bowel sounds
- Watch the provider for cues to move to the next abdominal quadrant
- 3.2. Post Physical Exam
  - a. Print the patient's AVS
    - Click on the Providers appointment in Dashboard
    - Then click on the print button
  - b. Print the Home Medication list if any changes
    - Click on Providers appointment in Dashboard
    - Then Click on Active Medications
    - Click Print
    - Click Home Medication List
    - Click Print

## 4. ADDITIONAL RESOURCES

- 4.1. References:
  - Leg Ace Bandaging; HF#4406Copyright © 04/06/2012 University of Wisconsin Hospitals and Clinics Authority. All rights reserved. Produced by the Department of Nursing. HF#4406 taken from <u>http://www.uwhealth.org/healthfacts/B\_EXTRANET\_HEALTH\_INFORMATION-</u> <u>FlexMember-Show\_Public\_HFFY\_1126651050170.html</u>
- 4.2. Supporting documents available:
  - <u>Core Telepresenting Procedure</u>
  - Lippincott

# 5. DOCUMENT HISTORY

Version No.	Revision Description
1.0	New Document.
2.0	Revisions Scope updated to include more succinct and concise terminology & explanation. Definitions added to add to ease of reading document. Section 3.8- B-lungs: "Assess 2 upper, 2 mid and 2 lower lobes for 6 locations" Section 3.8- B-heart: Deleted extra heart sounds leaving: Aortic valve, Pulmonic valve Tricuspid valve, Point of Maximal Impulse (PMI). Section 3.8-B- Abdominal: Step 2: Auscultate abdomen for bowel sounds "in 2 different quadrants" Section 3.9 Post Physical Exam: "Print After Visit Summary via Dashboard, changes made by provider to medications etc. will be in the After Visit Summary"
3.0	Revisions- Removed content that is duplicated from Core Telepresenting procedure document: <u>https://documentcontrol.mfldclin.org/sites/iqips/Policies%20and%20Procedures/ Core%20Telepresenting.docx</u> Removed Marshfield Clinic Logo, Updated Quick Part in Header, Reformat of Section 2.

4.0	Revisions- Changed section to say "mitral valve can be heard best in 3.5C". Changed reviewed date/revised date.	