

Telehealth Endocrinology Presenting

1. SCOPE

- 1.1. Marshfield Clinic System Wide Telepresenters

2. DEFINITIONS & EXPLANATIONS OF TERMS

2.1. Abbreviations

- RN: Registered Nurse
- LPN: Licensed Practical Nurse
- MA: Medical Assistant

2.2. Definitions

- Polycom: Refers to the video conferencing system
- Pulses: 3+= bounding, hyperkinetic, 2+= normal, 1+= weak, thready, hypokinetic, 0= absent
- Scoliosis: Lateral curvature of the spine
- Scapula: Shoulder blade
- Iliac crest: Upper border of hip bone
- Lipohypertrophy: A buildup of subcutaneous fat tissue at insulin injection sites
- Telepresenter: An RN, LPN, or MA who is trained to use technology, such as a digital stethoscope, otoscope, examination camera, etc., to facilitate comprehensive exams under provider guidance
- Edema assessment: 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 +)
- Thyroid lobes: The lobes are somewhat harder to feel than the isthmus. The anterior surface of a lateral lobe is approximately the size of the distal phalanx of the thumb and feels somewhat rubbery
- Thyroid isthmus: lies across the trachea below the cricoid
- Reflexes: Patellar/Quadriceps Reflex- A reflex contraction of the quadriceps muscle resulting in a sudden involuntary extension of the leg, produced by a sharp tap to the tendon below the patella

3. PROCEDURE BODY

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

3.1. Pre-Consult Preparation

- a. See [Core Telepresenting Procedure Document](#)
- b. Be sure to select the appropriate provider and date of visit
 - Vitals for over 24 months of age
 - Height using standiometer in cm
 - Weight in kg
 - Pulse
 - Blood pressure

Refer to [ACO Blood Pressure Screening Process](#)

- Vitals for 12 months and under
 - Weight in kgs
 - Length in cms
 - Head circumference in cm
- c. Fax blood sugar log containing the patients last 2 weeks of blood sugar results to the provider before the visit. Be sure to include the patient's name and medical history number on all pages
- d. Use the link below to upload insulin pumps using CareLink Pro:
<https://carelink.medtronic.com>
- e. Let provider/MA know when upload is complete or fax/email results to the provider/MA. If upload is not possible, write down blood sugar readings from patient's meter from the last 2 weeks and fax to the provider office. The following link provides a quick guide for using Carelink:
[http://srdweb1/clinic/iqips/Telehealth/Quick%20Guide%20for%20using%20CareLink%20to%20upload%20insulin%20pump%20data%20\(2\).pdf](http://srdweb1/clinic/iqips/Telehealth/Quick%20Guide%20for%20using%20CareLink%20to%20upload%20insulin%20pump%20data%20(2).pdf)
- f. Check lab screen for recent hemoglobin A1C, fasting blood sugars, and urinalysis. Print these results for patient to refer to during visit with provider
- g. Perform Diabetic Foot exam according to Marshfield Clinic standard procedure if overdue on dashboard or per provider request. Please click on the link to access how to perform a diabetic foot exam:
<https://procedures.lww.com/lmp/view.do?pid=4436987&hits=foot,exam,diabetic&a=true&ad=false>

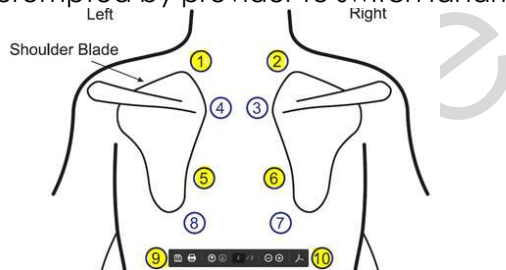
3.2. Provider Directed Physical Exam:

- a. **Thyroid assessment:** With the hand held camera or room camera, assist the provider to inspect the neck for the thyroid gland
- The thyroid is located just below the cricoid cartilage
 - Direct peripheral lighting with goose neck lamp at the front of patient's neck to allow the provider to inspect the region below the cricoid cartilage (located just below the thyroid cartilage [Adam's apple]). The thyroid is located just below the cricoid cartilage. The lower border of the large thyroid gland will be outlined with peripheral lighting
 - With the patient's head tipped back, instruct the patient to sip some water
 - The patient's thyroid will move up under your fingers as they swallow
 - The provider will be watching for upward movement of the thyroid gland, noting its contour and symmetry
 - If the provider requests the Telehealth nurse palpate the thyroid gland:
 - Have the patient in a sitting position
 - Instruct the patient to sit up straight and bend their head slightly forward and to the right to relax the muscles
 - Stand behind the patient
 - Place the fingertips of both hands on either side of the trachea just below the cricoid cartilage
 - Use the fingers on your left hand to push the trachea slightly to the right



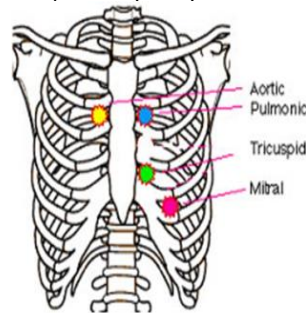
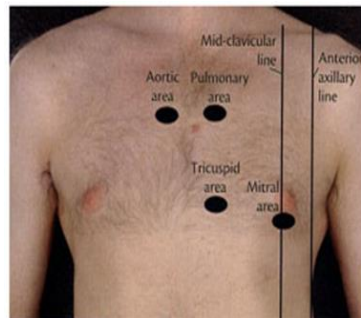
- Instruct the patient to sip some water
 - Feel the thyroid isthmus rise up under the finger pads. Please note it is often not palpable
 - Repeat the exam in the same fashion on the left
 - Report surface (lumpy or hard), enlargement (right > left), consistency of the gland, along with any nodules or tenderness
- b. **Lung assessment:**

- Position patient so his or her posterior side is to the room camera
- Place limited pressure with the digital stethoscope at the six posterior lung fields for two complete breaths or until prompted by provider to switch landmarks
- 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
- Position patient with anterior side facing the room camera. Use the digital stethoscope to auscultate two anterior lung fields or until prompted by provider to switch landmarks



c. Heart assessment:

- Position patient's anterior side to room camera and apply limited pressure to the digital stethoscope to auscultate in the four landmarks below:
 - Aortic valve
 - Pulmonic valve
 - Tricuspid valve
 - Mitral Valve/Point of Maximal Impulse (PMI)



- Watch the provider for cues to move to the next landmark

d. Abdominal assessment: be prepared to use both room camera and hand held camera for provider directed abdominal assessment

- Auscultation
 - Place patient in supine position and place digital stethoscope on patient's right periumbilical area to assess bowel sounds
- Palpation of abdomen on exam table

- May try the following measures to enhance complete muscle relaxation:
 - Teach patient to breathe slowly
 - Engage patient in conversation
- Technique:
 - Use flat part of hand or pads of fingers, not fingertips
 - Fingers should be together
 - Avoid sudden jabs
 - Use light(push down 1 cm) to deeper(push down 5-8 cm) pressure
- Note any tenderness, masses, firmness. Instruct patient to indicate if they experience any discomfort during palpation. Watch for non-verbal signs of discomfort e.g. patient pulls away, facial expressions
- Provider will speak with patient and guide palpation

e. **Liver assessment:**

- Technique:
 - Place your left hand behind the patient, parallel to and supporting the right 11th and 12th ribs and lift up to support abdominal contents
 - Remind the patient to relax into your hand if necessary
 - Press your left hand forward so the liver may be easily felt



- Place your right hand on the patient's right upper quadrant with your fingers lateral to the rectus muscle
 - Gently press in and up
 - Ask the patient to take a deep breath and try to feel the edges of the liver
- If the liver is palpable, the edge should be soft, sharp, and regular with a smooth surface
 - Measure length below mid costal angle
- On inspiration, the liver is palpable about 2 cm below the right costal margin in the midclavicular line



- f. **Back assessment:** Be prepared for possible use of handheld camera so provider can look at the patient's spine. Make sure the provider can see the patient's spine during this part of exam
- Forward bend test to check for scoliosis
 - Have the patient stand with feet shoulder-width apart
 - Have the patient bend forward slowly to touch their toes. Note equal elevation of shoulders, scapulae, and iliac crests
- g. **Diabetic patient skin assessment:** Be prepared to use the handheld camera for a provider directed skin exam
- Check fingertips for calluses
 - Look at insulin injection sites looking for Lipohypertrophy
 - Look at insulin pump sites looking for Lipohypertrophy
- h. **Extremity assessment:** Be prepared to use the hand held camera for a provider directed extremity exam. Inspect and assess extremities for:
- Pulses
 - Color
 - Pedal edema- lower extremities only
- i. **Deep knee tendon reflexes:** See link for [reflex assessment guide](#)
- Encourage the patient to relax.
 - Position the limbs properly and symmetrically. Hold the reflex hammer loosely between your thumb and index finger so that it swings freely in an arc within the limits set by your palm and other fingers.
- The telepresenter will grade the reflexes based on the following scale:
 - 4+= Very brisk, hyperactive with clonus (spasmodic alternation of muscular contraction and relaxation).
 - 3+= Brisker than average; possibly but not necessarily indicative of disease.
 - 2+= Average; normal
 - 1+= Somewhat diminished; low normal

PROCEDURE

- 0= No response/ absent

3.3. Post physical exam:

a. See [Core Telepresenting Procedure Document](#)

3.4. Post considerations:

a. See [Core Telepresenting Procedure Document](#)

4. ADDITIONAL RESOURCES

4.1. References:

Bickley L. S., Szilagyi P.G.(2007). *Bates' pocket guide to physical examination and history taking* (9th ed.). Philadelphia: Lippincott Williams & Wilkins.

Nettina, S. M. (2010). *Lippincott manual of nursing practice* (9th ed.). Philadelphia: Lippincott Williams & Wilkins.

TheFreeDictionary.com. Retrieved from <https://medical-dictionary.thefreedictionary.com> on February 2,2018.

4.2. Supporting documents available:

Diabetic foot exam policy/procedure:

<https://procedures.lww.com/lnp/view.do?pld=4436987&hits=foot,exam,diabetic&a=true&ad=false>

Carelink Pro Link: <https://carelink.medtronic.com>

[http://srdweb1/clinic/iaips/Telehealth/Quick%20Guide%20for%20using%20CareLink%20to%20upload%20insulin%20pump%20data%20\(2\).pdf](http://srdweb1/clinic/iaips/Telehealth/Quick%20Guide%20for%20using%20CareLink%20to%20upload%20insulin%20pump%20data%20(2).pdf)

[Core Telepresenting Procedure](#)

5. DOCUMENT HISTORY

Version No.	Revision Description
1.0	Conversion from Policy Handbook to Document Control: Procedure #2695.1
2.0	Updated links, definitions, and assessment information. 2/7/18 SD Removed Marshfield Clinic Logo, Updated Quick Part in Header, Reformat of Section 2.

When document is printed it becomes an uncontrolled copy. Please refer to DCS system for most current version.

6. DOCUMENT PROPERTIES

Primary Author: Dvoran, Sharon M

Co-Author(s): Sharon Dvoran, RN

Approver(s): This document has been electronically signed and approved by: Meyer, Christopher L on: 11/13/2018 2:22:36 PM

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This document has been electronically signed and approved by: Krueger, Kori K MD on: 12/3/2018 9:19:46 AM

Live

PROCEDURE