

OHSU Family Medicine Clinical Experience OSCE- Telemedicine: Foot Sore - Diabetes

Case Title: Foot Sore Diabetes – Telemedicine

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Time Allotted for Case: 10-13 minutes (+5 minutes of feedback)

Scenario: Patient who has diabetes asking for advice via a video visit on a worsened foot sore. Patient lives far from a hospital and is resistant to come in.

Objectives:

- Utilize telemedicine video technology to clinically assess a patient with a diabetic ulcer.
- Identify the care needed for a patient with diabetes, rising blood sugars and a foot ulcer.
- Incorporate patient desires and social situation when negotiating a treatment plan.

SOM Assessed Competencies: Act in a consultative role, including participation in the provision of clinical care remotely via telemedicine (ICS8)

Room set up: Students will enter a room set up utilizing video conferencing. The actor will be in a separate location. If students and faculty are remote (not on site), they will also connect to the scenario utilizing the videoconferencing software.

Props for the room:

- Computer, tablet, or smart phone with video connectivity for actor
- Strong Wi-Fi reception for all remote participants, landline connectivity for on-site
- Videoconferencing and teleconferencing capability (land line voice connectivity and monitor for video)
- Software to simulate Video conference (Zoom for example)
- Two Page Student Scenario outside of the room in a plastic sleeve
- Lab sheet and Foot Photo uploaded onto the computer or software

Case setting	Family Medicine outpatient office
Patient name	Don or Donna Baker
Age of actor	Adult middle to elder age (the actor has to be able to portray retirement or early retirement age)
Gender	Per SP
Occupation	Retired Postal Service

Actor Script

CHARACTER: Don/Donna Baker, 74

DRESS: Casual

SETTING: At your home, connecting to your doctor via telemedicine from your home computer to your clinic

Affect: You are generally agreeable, but do not want to go to the hospital. You had to go last month and were sent home after considerable time and expense by your daughter.

You are feeling only a bit of discomfort from your foot more of a pressure than a pain, but you should downplay that (diabetics do not have normal sensation in their feet). If asked about the pain you'll say something like "It doesn't hurt much" **Only if asked if you can feel pain in your feet usually then state "No, I can't feel much in my feet anyways because of the diabetes."**

You will answer the student's questions and not hold back information.

OPENING LINE: "I've still got a sore on my foot and it seems to be getting worse. I don't think it's anything but my daughter wanted me to get in touch with you so I did."

CHIEF COMPLAINT: Foot sore

Background of Chief Complaint:

Your foot sore has worsened over the last 3 days. You have Type II Diabetes and don't heal well, so you emailed your physician last night to set up this consult via telemedicine. Your family physician is 30 miles away and the closest hospital is 200 miles away. You live in Crane, Oregon and feel comfortable using this telemedicine interface and have uploaded readings from your digital blood sugar monitor and a photo of your foot.

Last month you developed a small sore on your right big toe, and after consulting with your physician, you were sent to the hospital emergency department over 200 miles away for evaluation with labs work up and imaging to help exclude a bone infection requiring hospital admission, iv antibiotics, and possible toe amputation. Your daughter drove you at considerable expense and time. When you arrived at the hospital emergency department they evaluated the affected foot and determined the sore was just a mildly infected blister. You were discharged home with oral antibiotics, requiring you and your daughter to stay in a hotel overnight. You were frustrated by what seemed like an unnecessary trip and do not want this to happen again. You only reluctantly emailed the physician about the sore on the right big toe due to the sore enlarging and now having a foul odor. Despite this, you still do not think it is anything serious and only contacted your physician at the urging of your daughter. You do not want to make any unnecessary trips to have the foot evaluated if you don't have to.

You like your doctor and appreciate the use of technology to prevent you from having to always drive in to clinic, but you are still irritated with him/her for sending you to the hospital for a "false alarm" last month. The student is portraying a physician who is filling in while Dr. Smith is away. The student has a summary of your medical care, but has never met you before.

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Symptoms:

- Diabetes for 20 years, happy with digital monitor for blood sugar
- Struggling with diet because there are no grocery stores near you
- No side effects from your metformin 1000mg twice a day, long acting and short acting insulin
- Never had problems from diabetes until this sore on your foot, wonder if that's related
- Same sore as last month but noticed it was worse 3 days ago when you were taking a shower
- Sore has grown in size and changed from pink to dark brown
- There is a new foul odor in the sore
- You have stayed off your feet the last day and soak them in warm water with Epsom salt without improvement
- You think this will fix the problem because last time you didn't need treatment, but your daughter came over last night and was worried about it so took a picture for you to email to your doctor along with your labs.

PAST MEDICAL HISTORY:

- Diabetes, last blood sugar testing was two months ago, you do not remember the number but you were told that it was where it should be. **Last saw a doctor** in the ED last month.

MEDS: Metformin 1000mg twice a day, 20 units of lantus at bedtime, 7 units of Humalog before each meal, meds mailed to you via Medicare coverage.

ALLERGIES: None that you know of

SOCIAL HISTORY:

Lives with: Alone, divorced; daughter and her family close in Bend

Children: Daughter Jill, her partner and your 5 yo grandchild Jack.

Work: Retired from postal service

Exercise: Walking around your several acres

Hobbies: Photography, time with grandson

Tobacco Use: Never

Alcohol Use: 1-2 beers a week

Drug Use: Rare marijuana

Sexual History: Not sexually active since divorce from partner

FAMILY HISTORY:

Father: died of natural causes in 70s, Type 2 Diabetes

Mother: died of natural causes in 90s

Siblings: Younger sister is healthy

Other: None

IMPORTANT NOTES:

- At the beginning of the encounter, place your face slightly off camera so the student can only see half of your face. If the student does not ask you to adjust your camera after the first minute of the encounter, ask the student if he/she can see you ok. If they still don't ask you to adjust your camera, do it yourself and give them feedback at the end of the encounter that they should help make sure the patient is fully visible when doing a telemedicine encounter.
- If the student asks you what your blood sugar readings are, say "I am not sure, but I emailed them".
- If the student asks you to show him/her your foot, tell him/her you emailed a picture your daughter took". **Do not offer to show the student the picture if he/she is asking you to describe the sore. The student needs to specifically ask you to show him/her the actual sore before you offer this information.**
- If the student tells you that you need to go to the hospital, you will say, "No, doc, I'm not doing that." **Do not offer that you will drive in to Burns but you will agree to it if the student offers it as a solution.** You think this is another false alarm and don't want to spend the time and money on an unnecessary trip as well as further burden your daughter and her family. You will also resist a recommendation for a clinic visit but agree to it if the doctor insists. Try to push for an alternative plan that doesn't require travel.
- You will listen to the doctor's recommendations, but ultimately you will not consent to making the trip to Bend.
- Though you will not offer it unless the doctor mentions it, you are willing to follow up with the doctor at their office which is 30 miles away if he/she determines things are getting worse. You will consent to whatever the doctor says you need to do, such as send daily updates of blood sugars, pictures, etc.

PHYSICAL EXAM: Tell the student you sent in a picture of your foot.

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Telemed Room Setup:

Speakerphone found in cupboard. Sitting on rolling table, closet to computer cart.



Cart: Pull from storage room in the hallway.

Stool

Rolling Cart

THESE NEXT TWO REFERENCE SHEETS (lab results and foot photo) SHOULD BE UPLOADED TO THE COMPUTER FOR THE STUDENT. Via WORD document OR on the Epic Train Telemedicine Software – do not have the following sheet outside of the room (the student must be able to access it in the computer)

Laboratory Data

Patient Name: D. Baker

Last Lab Hemoglobin A1c (2 months prior) 7.6

Blood Sugar Monitor weekly report

Four Days Ago

0700	150 mg/dl
1300	174 mg/dl
1800	190 mg/dl
2300	166 mg/dl

Three Days Ago

0800	160 mg/dl
1200	182 mg/dl
1700	242 mg/dl
2230	300 mg/dl

Two Days Ago

0700	196 mg/dl
1400	294 mg/dl
2100	332 mg/dl

One day Ago

0800	221 mg/dl
1600	288 mg/dL
2130	370 mg/dL

Today

0700	320 mg/dl
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D. Baker Uploaded Foot Photo



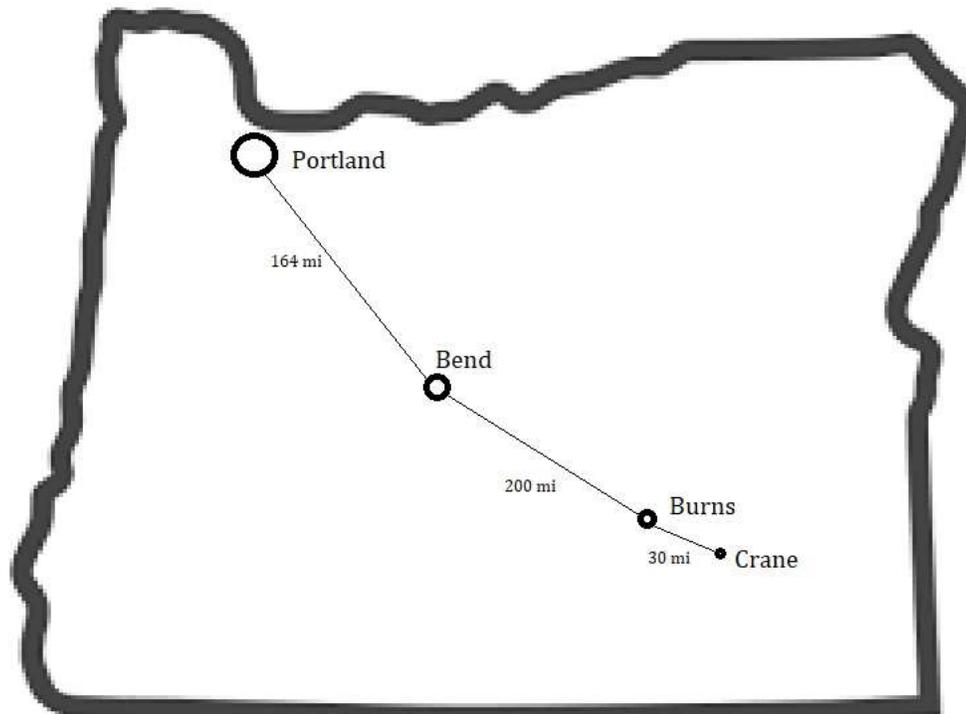
(Image found on Google Images from <http://ducttapeandparacord.files.wordpress.com/2013/12/diabetic-foot-ulcers.jpg?w=150&h=112>)

Student Scenario

You are at clinic doing a telemedicine consult with Don/Donna Baker who is at home in Crane, Oregon. He/she has chronic Type II diabetes. You working as a locums in Burns, Oregon filling in for the Baker's family physician, Dr. Smith. Dr. Smith has done several telemedicine consults with this patient and he/she is familiar with the format. The patient's home is approximately 30 miles away from the clinic you are currently working at and 200 miles away from the nearest hospital in Bend.

Last night Don/Donna emailed you with a complaint of a sore on his/her right toe. Notes reveal that a similar situation happened last month. At the time Dr. Smith had no way to visually inspect the sore and feared it might be diabetes related, so he sent Mr./Mrs. Baker to the hospital. It turned out to be a mildly infected blister.

Your task at this station is to take a pertinent history of present illness, determine the level of severity of the sore and recommend management inclusive of the patient's limitations. You do not have to do an exam, but have files available with lab values and a picture of the foot sore.



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Observer Checklist**

Student: _____ Date: _____

Place a check in front of each task that the student accomplished correctly. Do not place a check for any tasks that were forgotten, done partially or incorrectly. If "and" is used for a task, the student must complete all tasks. If "or" is used for a task, the student must complete or address at least one of the tasks. Students will have 2 minutes to "wrap-up" the interaction, discuss follow-up, and/or provide closure without prompting.

Interpersonal and Communication Skills, Includes the Four Habits. *The student:*

- _____ 1. Builds the relationship (not rushed, introduction, eye contact, attention, empathy, asks how to address)
- _____ 2. Establishes the agenda (elicits concerns, agrees upon agenda)
- _____ 3. Facilitates understanding (speaks clearly, avoids medical jargon, high priority information)
- _____ 4. Summarize and confirm understanding (summarizes plan, elicits questions, uses teach back)
- _____ 5. Showed listening body language (leaning forward, looking at patient)
- _____ 6. Used empathetic techniques (repeat feelings, legitimize concerns)
- _____ 7. Appropriately admitted uncertainty, and, if applicable, offered to get more information for patient
- _____ 8. Voices understanding of patient's context (distance from medical care, transportation)

Clinical Knowledge: *The student:*

- _____ 9. Asked about at least two of the foot sore's signs (e.g. redness, odor, drainage).
- _____ 10. Asked about at least 1 symptom to determine if there is systemic spread fever/chills, swelling)
- _____ 11. Asked if the patient were feeling pain AND asked baseline foot sensation
- _____ 12. Asked how the patient is currently managing the foot sore.
- _____ 13. Performed medication reconciliation INCLUDING dosing and timing of medications.
- _____ 14. Asked when the photo was taken AND interpreted it as a diabetic ulcer with infection
- _____ 15. Verbalized the elevated blood sugar readings.
- _____ 16. Suggested that the blood sugar elevations are likely due to the patient's foot infection.
- _____ 17. Informed the patient about potential dangers of not treating the infected diabetic ulcer. (e.g. amputation, death)
- _____ 18. Developed an action plan that included having a clinician or nurse examine the patient's foot within 24 hours.

Use of Technology: *The student*

- _____ 19. Asked the patient if he could see and hear with the technology (before asked by the patient).
- _____ 20. Makes any necessary adjustments for technologic issues (coaches patient to move camera).
- _____ 21. Accessed picture of foot and blood sugars
- _____ 22. Verbalized what he/she was doing when not focused on the patient (e.g., while looking at photo).
- _____ 23. Remained patient-centered despite distractions (Keeps the focus of the visit on the patient rather than the technology)

Comments for the student:



Follow-up: Would any further learning activities be helpful to this student? Yes/No

Specific skills to address:

Evaluator Name: _____