

Practical Tips for Performing Nutrition Assessment Remotely via Telehealth Inpatient and Outpatient Settings

Whether the patient is in the inpatient or outpatient setting, nutrition clinicians have been challenged by the pandemic to perform nutrition assessments via telehealth. The purpose of this fact sheet is to review in-person and remote nutrition assessments including data collection methods, adapted nutrition-focused physical exam, and practical tips to overcome challenges in providing a high-quality nutrition assessment via telehealth.

Barriers to Telehealth Nutrition Assessment

Issues for Outpatient Care

- Increased reliance on patient participation.
- Lack of ability to palpate the patient.
- Challenges with technology include visibility/quality, connection failures, and patient comfort with technology.

Issues for Inpatient Care

- With limited nutrition staff in institution, dependence on nursing or medical staff to help gather information.
- Inability to participate in team rounds.
- Lack of access to facility resources for documentation and entering orders remotely.

KEY FACTS

- ✓ Telehealth and the telenutrition strategy are emerging areas of practice.
- ✓ There are several challenges in obtaining the needed information when using telehealth.
- ✓ Approaches to nutrition assessment via telehealth need to be modified for patient type and care setting.

Data Collection Methods: In-Person vs. Remote

Nutrition Assessment Data	In-Person Data Collection	Remote Data Collection
Food and nutrient intake/administration Nutrition quality of life	<ul style="list-style-type: none"> • Medical record review • Patient interview • Dietary records 	<ul style="list-style-type: none"> • Medical record review • Patient interview • Dietary records
Physical activity Functional status	<ul style="list-style-type: none"> • Patient interview • Digital activity log • Measurement using dynamometer 	<ul style="list-style-type: none"> • Patient interview • Digital activity log
Nutrition-related medications, labs, tests	<ul style="list-style-type: none"> • Medical record review • Measurements taken in clinic 	<ul style="list-style-type: none"> • Medical record review
Nutrition and food-related knowledge, beliefs, attitudes; stage of change	<ul style="list-style-type: none"> • Patient interview • Observation of non-verbal cues 	<ul style="list-style-type: none"> • Patient interview • Observation of non-verbal cues (video)
Anthropometric data (height, weight, weight history, etc.)	<ul style="list-style-type: none"> • Medical record review • Patient interview • Measurements taken in clinic 	<ul style="list-style-type: none"> • Medical record review • Patient interview
Estimated nutrient needs	<ul style="list-style-type: none"> • Indirect calorimetry • Calculation using predictive equation 	<ul style="list-style-type: none"> • Calculation using predictive equation

Mauldin K, Gieng J, Saarony D, Hu C. Performing nutrition assessment remotely via telehealth. *Nutr Clin Pract.* 2021 Aug; 36 (4):751-768.

Pre-Visit Considerations

- Test audio and video prior to the visit
- Ensure your desktop or laptop has a high-quality camera (avoid smartphones)
- Set your camera at eye level
- Have adequate lighting
- Find a private location for the visit
- Silence your phone prior to starting
- Use a second screen to write notes/complete internet searches
- Prepare visuals and have materials open on the computer before starting the visit
- Consider engaging patients prior to the visit to prepare them for the visit (e.g., let patients know they should have a telehealth setup that has enough space for a nutrition-focused physical exam)

Continues on next page

KEY TAKEAWAY MESSAGES

- ✓ Encourage patient participation as much as possible by using technology.
- ✓ Ask specific questions to assess factors that you might not be able to observe.
- ✓ Engage with patient and/or hospital staff to maximize communication.

Considerations During Visit

- Look directly at the camera
- Minimize background noise; wear headphones and use a microphone
- Confirm with the patient that they can see and hear you at the start of the visit
- Obtain verbal, informed consent from the patient before delivering telehealth services and document the consent

Post-Visit Considerations

- Documentation needs to be clear that the visit is a telehealth visit
- If multiple people were on the video-conference, document who provided answers to questions
- If applicable, send the patient a follow-up message with visit summary, requested handouts, and/or reminders for patient images for documentation/monitoring and evaluation

Watch Related Videos on nutritioncare.org/Malnutrition

Performing Nutrition Assessment Remotely Using Telehealth:

- A Focus on the Outpatient Setting
- A Focus on the Inpatient Setting

Nutrition-Focused Physical Examination (NFPE) Adaptations for Telehealth

NFPE Component	Clinician Assessment Actions	Questions to Ask Patient
Functional status	<ul style="list-style-type: none"> • Observe posture/position/physique • Notice if patient is sitting/lying in bed, if able to maintain posture 	<ul style="list-style-type: none"> • Do you notice any signs of weakness? • Has your activity level changed? If so, how? • Ask about activities of daily living/time spent on activities
Fat and muscle wasting	<ul style="list-style-type: none"> • Notice visible losses of fat or muscle • Guide patient to show each area of body • Explain positioning • Consider asking for photos for monitoring and follow-up evaluation 	<ul style="list-style-type: none"> • Have you noticed any changes in weight? • Does your face appear thinner? Suggest patient look back at recent photos for changes • Do your clothes, belt, jewelry, glasses, dentures, etc. fit differently?
Fluid status	<ul style="list-style-type: none"> • Teach patient how to assess quality of edema • Teach patient skin turgor assessment (back of hand, forearm, sternum) 	<ul style="list-style-type: none"> • Have you noticed any increase in puffiness/fluid accumulation in your ankles/around your feet? • How far up your leg does swelling occur? • Is there indentation when you press on your skin? How long does the indentation last? • Pinch skin; after letting go, does the skin return to its original position? How long does it take?
Micronutrients: skin	<ul style="list-style-type: none"> • Observe facial skin, notice any discoloration, rashes, or poor pallor 	<ul style="list-style-type: none"> • Have you noticed any rashes or changes in your skin, areas of flaky skin, redness, wounds?
Micronutrients: hair	<ul style="list-style-type: none"> • Observe hair; ask to see arm hair 	<ul style="list-style-type: none"> • Have you noticed any difference in your hair? • Has your hair been falling out more? Are you waking up with hair on your pillow? • Does arm hair look like a corkscrew?
Micronutrients: nails	<ul style="list-style-type: none"> • Ask to see nails up close on camera • Ask patient to push on nail bed to demonstrate blanching 	<ul style="list-style-type: none"> • Have you noticed any difference in your nails? • Are your nails breaking more easily?
Micronutrients: eyes	<ul style="list-style-type: none"> • Observe eyes • Ask patient to lightly pull down on bottom eyelid to assess conjunctiva color 	<ul style="list-style-type: none"> • Have you noticed any changes in eye health or color? • Have you had any trouble seeing in general or seeing at night? • Are you experiencing dry, stinging, or burning eyes?
Micronutrients: mouth	<ul style="list-style-type: none"> • Observe mouth and lips • Ask to see tongue, inner bottom lip, and gums 	<ul style="list-style-type: none"> • Have you noticed any sores in your mouth or changes with your teeth? Any trouble with bleeding gums? • Are you having difficulty chewing/swallowing? • Any taste changes?

Mauldin K, Gieng J, Saarony D, Hu C. Performing nutrition assessment remotely via telehealth. *Nutr Clin Pract.* 2021 Aug; 36 (4):751-768.

- References:**
1. Mauldin K, Gieng J, Saarony D, Hu C. Performing nutrition assessment remotely via telehealth. *Nutr Clin Pract.* 2021 Aug; 36 (4):751-768.
 - NCP continuing education article: <https://aspen.digitellinc.com/aspen/publications/13/view>
 - Listen to a discussion of this manuscript with the NCP Editor-in-Chief and the author: <https://nutritioncare.org/podcasts>
 2. Mulherin DW, Walker R, Holcombe B, Guenter P. ASPEN report on nutrition support practice processes with COVID-19: the first response. *Nutr Clin Pract.* 2020 Oct; 35(5): 783-791.

Supported by:



www.NestleMedicalHub.com