

[MUSIC PLAYING]

**DANIELLE R. KARHUT:** Good afternoon. My name is Danielle Karhut, and with me is Kory Lester. Today, we will be discussing rehab for spinal cord injury oncology patients. Today, we will be reviewing the general overview of inpatient rehab oncology program, review two case studies, and discuss the role occupational therapy plays in this rehab.

One third of patients who reported having limitations with ADL or IADLs believe that cancer caused their limitations. Occupational therapy is designed to help people with these impairments and other needs improve their overall quality of life by facilitating engagement in meaningful everyday activities.

**KORY LESTER:** The inpatient rehab oncology program is held on the spinal cord injury unit here at UPMC Mercy. In this program, patients will be able to participate in family meetings to address their goals and discharge planning. They will take part in personalized education with hands-on training and work with our team of doctors, nurses, and therapists to plan for their next level of care while maintaining quality of life.

The oncology program is typically completed over a two week length of stay. So why is it such a short length of stay? Well, during an oncology admission, we focus more on family training and transitioning to home or the next level of care as opposed to a typical rehab stay where we are expecting better outcomes in exercising, endurance, and ADL retraining.

A lot of our oncology patients are admitted with a poor prognosis. So we take into consideration their quality of life while also planning for a safe discharge. As I'm sure most of you can imagine, most oncology patients would rather be home with their family participating in meaningful activities as opposed to staying in the hospital for longer than what's needed.

Much like a typical rehab admission, an evaluation is completed within the first 24 hours of being on rehab. This evaluation determines the patient's strengths, weaknesses, limiting factors, and we begin discharge planning on day one. From there, the therapists determine an appropriate plan of care. This is where prognosis plays a pretty large role. Unfortunately, we don't always receive a prognosis from the oncologist, or maybe the patient and/our family hasn't been properly educated on what their prognosis is. So this sometimes limits what we can complete during the rehab stay.

More towards the second week of the stay, therapists begin in-depth family training, whether it be with general education, therapist demonstration, or hands-on training. Throughout the entire admission, we are always thinking about discharge planning, including the appropriate DME, the patient's home setup, how is the patient going to get home, and what further services will be required.

The final aspect to note with the oncology rehab program is that these patients complete 900 minutes of therapy over a seven day period. This is a less intense rehab program. So this allows the therapists to upgrade or downgrade treatment depending on what the patient can tolerate while keeping them compliant with insurance expectations.

As I stated prior, family training is really the main goal of the program. It is initiated early and is continuous throughout the whole rehab stay. Every family training, every oncology rehab stay varies among each patient, their diagnosis, their prognosis, and what family support they have. Occupational therapy mainly focuses on their self care and their ADL routine, the appropriate DME relating back to their self care and ADL routine, proper transfers, proper positioning, and proper body mechanics for the caregivers.

Deciding the appropriate DME. In all the areas on your screen, we want, as the team, to plan for the progression of the diagnosis as well as the cancer treatment side effects such as fatigue. You can see some of these examples listed on the right side of your screen. When it comes to transfers, we want to think about a few key things. Can the patient ambulate? Will they require different types of strategies? Will the patient be doing transfers independently? Will the family members be assisting or even completing the transfers 100% of the time? It is also important to think if the family member is physically capable of assisting.

For transfers, options will range from wheeled walker or cane to sliding boards or Hoyer lifts. For bed options, what is the accessibility to the bedroom at home? If the bedroom is located on a different floor, can the patient safely get there or is a hospital bed necessary? Even if the bedroom is accessible, does the patient require a height adjustability of the bed for safety of transfers and/or positioning or pressure relieving? Something to note, if a Hoyer lift is required for transfers, then a hospital bed may be needed due to the safety of placing the lift base underneath the bed.

Bathing. Again, is the bathroom accessible or will the patient be able to safely complete shower transfers? If so, will they need a seat for the shower or DME that is more supportive such as a tilt and space shower chair? Now, if the bathroom is not accessible, a bed bath could be the next option. As OTs, we will work with the family on figuring out the best and safest option along with how to complete this.

The same goes for dressing and toileting. Can the patient complete themselves with or without strategies? Or will the family member be completing these tasks? And if so, what are the proper body mechanics for them to safely complete this task? Stemming off of body mechanics, OTs can properly address positioning for the patient, whether it is in a wheelchair or even bed as well as educating the family on how to position themselves to assist the patient safely. As you can see, everything overlaps and builds off of each other.

Here, we have some pictures of equipment that we may recommend for some of our oncology rehab patients. The first picture that you'll see on your screen is a padded drop arm bedside commode. This piece of equipment is mostly used for toileting. It may be good for a patient who is ambulating, stand pivoting, or slide boarding for their main mode of transfers. The patient would require good sitting balance and endurance. This is usually covered by insurance and can be used free standing in the home or over a toilet.

The second piece of equipment in the middle of the screen is a tilt and space shower chair. This can be used for toileting or bathing. The patient that would be using this chair would mostly be using a Hoyer lift for their transfers and would probably have poor sitting balance and poor endurance. This piece of equipment has some limiting factors, as the home set up must have a flat shower to get this in and out of the shower. And it is usually not covered by insurance. And it can run up to \$5,000 to \$6,000. So it is not always accessible for some of our oncology patients. This piece of equipment can also not be rented due to hygiene purposes.

The third piece of equipment that we have here is a padded tub bench. This is mostly used for bathing. This would be good for a patient who is ambulating, stand pivoting, or slide boarding. This patient would require good sitting balance and good endurance. This is also not covered by insurance, but it is a little bit more accessible financially with most chairs running between \$50 and \$200.

**DANIELLE R.**

**KARHUT:**

The first case study we will be discussing is of a 44-year-old man who initially presented to the ER with a headache and low back pain. This gentleman had a history of metastatic melanoma to his right thigh and sacrum with a new diagnosis of intracranial mets. Prior to rehab, he had undergone five fractions of radiation to his sacrum and received whole brain radiation. Upon arrival to rehab, this gentleman had progressive paraplegia with neurogenic bowel and bladder.

Prior to admission to the hospital, the patient had been residing with his wife and their two young children in a ranch style home with seven steps to enter. The patient's wife was adamant from the beginning about taking her husband home and had already been looking into ramps for the front entrance. Family training began right away. His wife was physically present during morning ADLs for bathing, dressing, and transfers, receiving hands-on training.

A large focus of training was on the transfers. The patient's wife was educated and demonstrated proper body mechanics for sliding board transfers as well as the Hoyer transfers. This gentleman would become very fatigued as the day went on and would require more and more assist. The patient, his wife, and I all decided that the Hoyer would be the safest option all around. This was also the best option for his parents who would be assisting as needed.

Now, sliding board transfers were still taught because the patient's goal was to go to his daughter's softball games. And due to his leg weakness, this was the best option for car transfers. Other education was provided on peristyle dressing techniques, bed mobility, and even Hoyer sling placement.

Now, this gentleman safely and successfully discharged home after two weeks stay in inpatient rehab with his wife and kids. He did require hands-on assist for all self care tasks as well as transfers. Unfortunately, this gentleman had passed away within a month due to the progression of his cancer. However his family was able to safely care for him and he was able to attend in person several of his daughter's softball games.

**KORY LESTER:**

A second case study that we'll be going over today is a little bit more of an atypical oncology rehab admission for a few different reasons that I will touch on as we go through the case study. This case study was of an 83-year-old female. She presented to the emergency room with worsening low back pain and lower extremity weakness. She had a history of multiple myeloma with lesions in the spine. She was diagnosed with a new T5 compression fracture and L4 to L5 stenosis.

During the admission, an L4 to L5 laminectomy and decompression were completed. At the time of her oncology rehab stay, her prognosis was unknown. She had made the decision to put her cancer treatment on hold while she was in rehab. Prior to the admission, she lived in a one story home with 13 steps to enter with her 80-year-old sister. She was independent with her ADLs and had assistance with her IADLs such as medication management, cooking, cleaning, and financial management.

So the first aspect of this study that makes it atypical is that her length of stay was approximately three and a half weeks, which is a little bit longer than what we typically have for an oncology patient. Her main goal was to get home with her family, but our team wasn't sure if she was going to have the proper support that she needed to be safe. So we just needed a little bit more time to plan for her safe discharge and acquire the proper equipment that she would need.

The second aspect of this case study that makes it atypical is family training. This patient was on her rehab during the COVID pandemic, and she actually had a low risk exposure in her transition to rehab. So initially, her family members were pretty hesitant about coming into the hospital and even towards the end of her stay didn't want to come into the hospital due to their health and their risk of being exposed. So all of her family training was completed virtually via FaceTime throughout the last week and a half of her rehab stay. This particular patient didn't require an excessive amount of physical assistance. So the physical therapist and I determined that this would be safe enough to get her home, which was her main goal.

At the time of her discharge, she was independent with her upper body ADLs and grooming from a wheelchair level. And she required assistance with her lower body dressing and any standing tasks. She did walk, but the recommendation was that she continued to work on walking with only home care and that she complete slide board transfers with her family for her daily routines.

We also recommended that she continue to have supervision with all of her IADLs due to cognition decline throughout her rehab stay and encouragement to participate in daily life tasks, keep up with her nutrition, and participate in meaningful activities. Despite all of the challenges that this particular patient faced, she did make it home with her family, which was her main goal. So we like to think of this as a successful patient.

**DANIELLE R.  
KARHUT:**

The overall goal of this program is to train the patient and their caregivers on the activities of daily living and how to increase their overall quality of life. We always want to collaborate with all the disciplines for a successful discharge of these patients. Here are our citations.