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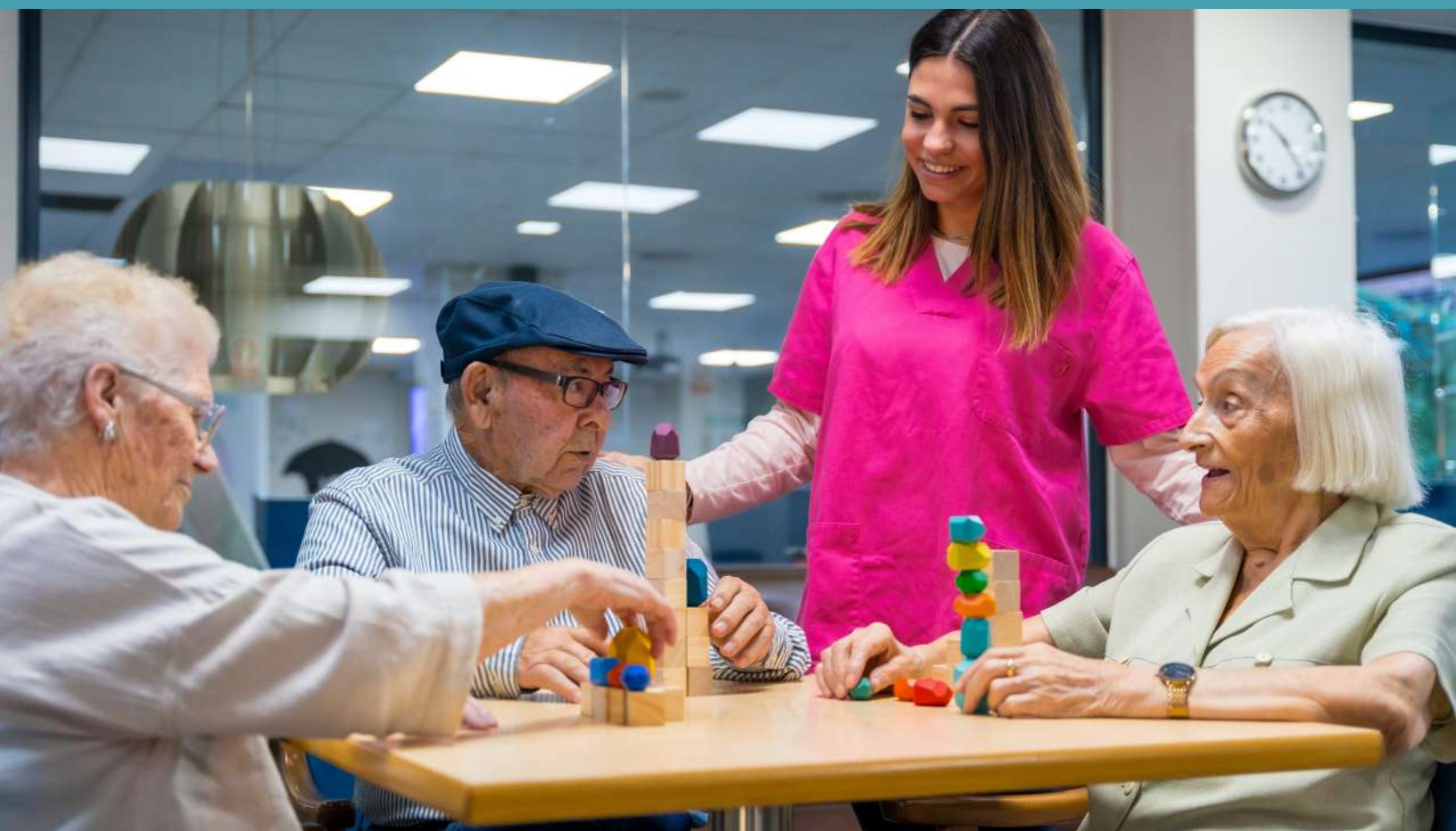
Fundamentals for Skilled Nursing



Introduction

With a growing aging population, geriatric care as a whole is becoming more essential to the fabric of our society. This means the United States will see an even greater number of geriatric care centers such as assisted living facilities (ALFs), skilled nursing facilities, and long-term care facilities (LTC) established in coming years. Each of these practice settings needs qualified healthcare professionals to treat both short-term patients and long-term residents. As a result, occupational therapists (OTs) and certified occupational therapy assistants (COTAs) are among the providers in high demand in this setting.

OTs and COTAs are key members of the skilled nursing facility team as they rehabilitate patients from orthopedic and neurological concerns while also helping patients with chronic illnesses better manage their condition(s). OTs and COTAs also have a large role in the discharge of patients from SNFs, since they formulate discharge recommendations and ensure patients have a safe environment to further recover in. This course will create a broad picture of what to expect in this setting for therapists who are new graduates, looking to add per diem SNF work, or considering changing settings.

Section 1: Skilled Nursing Facility Basics

References: 1, 2, 3, 4, 5

Skilled nursing facilities (also known as SNFs) are healthcare facilities that provide skilled nursing care and, in most cases, skilled rehabilitation services. SNFs must meet certain regulations and possess a few certifications in order to offer this type of nursing, medical, and rehabilitative care. Skilled nursing facility is the term that describes the facility itself, but there are various types of care that may be offered

within such an organization. It's important to understand what services fall under each of these categories along with where each falls within the continuum of care.

Skilled Nursing's Place in the Continuum of Care

At the bare minimum, skilled nursing facilities offer skilled nursing care and skilled rehabilitation services. Patients do not need to receive both services to be admitted to a SNF, as some people may only require skilled nursing care or skilled rehab to recover from health problems. Depending on size, staffing, and certifications, SNFs may also offer subacute care (also known as transitional care) and/or long-term care. Each of these services involves less complex care than what someone would receive in a hospital, which is considered the highest level of care. This does not reference the quality of care someone is afforded, rather the amount of close care they need. Patients in the hospital are not always medically stable and, thus, require more services and more frequent monitoring.

Hospital-based care is a level of healthcare that offers treatment for brief but severe illnesses. This may include acute episodes of chronic illnesses, the treatment of trauma or other acute illnesses, or recovery after surgeries. The average length of stay (LOS) for a patient in the hospital is between 4 and 6 days.

Subacute care is another comprehensive inpatient program that is one step down from the hospital. Patients who receive subacute care may also be experiencing an acute onset or exacerbation of an illness or injury. However, those who receive subacute care have a delineated course of treatment and do not require intensive diagnostic or other procedures to stabilize their condition. Individuals receiving subacute care have less medical needs than those receiving hospital-based care, but they have more medical needs than the majority of other patients in a skilled nursing facility. The average LOS for subacute care patients is 10 to 14 days.

Patients who receive subacute care will participate in between 2 and 3 hours of rehabilitation services each day.

Most individuals in skilled nursing facilities benefit from daily involvement of skilled nursing and rehabilitation staff. Patients receiving standard skilled care in a SNF may receive services such as physical therapy, occupational therapy, speech-language pathology, intravenous injections, comprehensive wound care, monitoring of vital signs, and management of medical equipment. Patients receiving standard skilled nursing care will get up to 1 hour of rehabilitation services each day. The average LOS for standard skilled care in a SNF is between 20 and 38 days. Since each of these services requires healthcare providers to regularly gauge a patient's medical necessity, they are often covered at least in part by health insurance.

Individuals do not qualify for skilled nursing care or sub-acute care if their only needs are custodial in nature. Individuals who receive custodial care alongside skilled rehabilitation and nursing will receive insurance coverage for such services, but not if they are provided in isolation. Patients who require custodial care only are considered long-term care patients because these services are provided over the course of several years. The Administration on Aging notes that the average length of stay for women who utilize long-term care services is 3.7 years and for men, this figure is 2.2 years.

Criteria for Admission to Skilled Nursing

In addition to having a good understanding of the levels of care, therapists should also be aware of admission criteria for a skilled nursing facility. In order for an initial admission to a skilled nursing facility to be medically necessary, a patient must meet each of the following criteria:

- The patient is medically stable.
- None of the skilled services they require can be provided at a lower level of care (e.g. outpatient clinic or home healthcare).
- The services provided at a skilled nursing facility are expected to significantly and measurably improve the patient's condition within a reasonable span of time.
- The patient's care plans for each discipline detail specific and realistic goals along with safe discharge plans.
- All skilled services the patient is to receive will be implemented by qualified and licensed clinicians while under the supervision of a licensed physician.
- The patient is already receiving and can continue to tolerate at least one skilled therapy each day along with daily skilled nursing.

While at a skilled nursing facility, patients must receive weekly, in-person evaluations by their physician, consultations on an as-needed basis, and skilled nursing services focused on the monitoring and evaluation of and intervention for current or emerging health concerns. Skilled nursing services may also include one or more of the following services depending on a patient's needs:

- Active management of chronic disease exacerbations
- Active management of a complex medication regimen with documented monitoring
- Complex wound care
    - One stage 3 or 4 pressure ulcer
    - Multiple stage 2 pressure ulcers

    - Other complex wounds that require daily dressing changes
- Intervention for or management of parenteral feeding (TPN) or enteral feeding
- Intervention for ostomy complications
- Intravenous (IV) or intramuscular (IM) medications administered every 12 hours or more
- New use of oxygen or another respiratory treatment
    - Nasopharyngeal or deep tracheal suctioning to stabilize an acute condition
- Management of a device or drain
    - Initial care for urinary or wound drain catheters such as a nephrostomy tube, bladder irrigation, suprapubic catheter, Jackson Pratt drain, or biliary drain
- Weaning protocols for ventilator- and/or tracheostomy-assisted breathing

Patients in skilled nursing facilities may or may not have complex nursing needs that require the above management strategies. As a result, patients in SNFs receive skilled therapy services either in isolation or alongside skilled nursing care. Patients must meet the following criteria to receive skilled rehabilitation services:

- The patient can tolerate one or more therapies at least 5 days each week for a minimum of 1 hour per day.
- Rehabilitation must be focused on treating a functional decline that may result from a recent disease, injury, illness, or surgery.

- The patient's prior level of function (PLOF) must be detailed in a therapy evaluation.
- The functional impairment(s) the patient is being rehabilitated for must warrant at least minimum assistance.

Patients receiving skilled rehabilitation in a SNF may participate in one or more of the following interventions: transfer training, cognitive retraining, activities of daily living (ADL) training, gait evaluation/training, speech and swallowing restoration, and therapeutic treatment focused on patient safety. In addition, all patients engaged in rehabilitation must respond to verbal and visual stimuli and follow simple commands in order to actively participate in their care. These criteria predict a patient's potential for rehabilitation, which is essential in order to be admitted to a SNF.

Criteria for Continued Skilled Nursing Stay

Facilities and payers set forth additional criteria that patients must meet in order to continue receiving care in a SNF. Much of the skilled nursing criteria is the same as for SNF admission with a few exceptions:

- Recent initiation of parenteral or enteral feeding or new feeding complications that require treatment plan adjustments.
- Complex medication-related adjustments including new dosages and/or types of medication.
- If wound care is still being provided on a regular basis, there should be documented progress as to wound healing.
- New respiratory treatment, nasopharyngeal/deep tracheal suctioning, or oxygen use at least 3 times per day.

- New or worsening mental status change(s) that are being addressed.
- New or worsening behavioral symptom(s) that are being addressed.

There are some additional criteria for continued rehabilitation in a skilled nursing facility and this criteria mostly relates to progress. Therapy patients must be making documented and measurable gains related to their goals in at least one rehab discipline. If patients are not progressing in therapies, they should continue to demonstrate medical necessity for receiving services at this level of care. In addition, patients who do not display sufficient progress should also exhibit medical instability that impacts their progress and is being addressed through short-term care plans.

Skilled Nursing Facility Interdisciplinary Team

Just as in other healthcare organizations, skilled nursing facilities have many professionals available to treat patients with a demonstrated need. Occupational therapists are called in to evaluate and oftentimes treat patients with suspected difficulties in ADLs. Physical therapists (PTs) usually evaluate and treat patients with impaired gait, balance, coordination, strength, and range-of-motion. Speech-language pathologists (SLPs) offer services related to cognition, mechanical feeding and swallowing, verbal expression, and other forms of communication. Because of the crossover between some disciplines (namely OT with PT and OT with SLP), cotreatment is a common method of service delivery in skilled nursing facilities. Cotreatment can also be a more efficient way to give patients the care they need, since individuals receiving subacute and skilled nursing services must tolerate a certain amount of care each day. In addition, cotreatment can prevent duplication of services by therapists from different disciplines, which may be a possibility in inpatient settings when therapists are not communicating properly.

Section 1 Personal Reflection

When thinking of an elderly patient receiving skilled nursing care after a recent stroke, what various ways can an occupational therapist and a speech-language pathologist collaborate during cotreatment?

Section 1 Key Words

Acute care - A hospital-based level of healthcare that offers medical services (skilled nursing, close medical monitoring, and rehabilitation) for patients with brief but severe illnesses

Cotreatment - When more than one professional discipline directly works together to address a patient's goals during a single therapy session; cotreatment helps interprofessional collaboration and communication in many practice settings, but is especially common in hospitals and SNFs

Custodial care - Simple personal care that entails non-skilled assistance with basic activities of daily living (BADLs) such as dressing, toileting, bathing, eating, hygiene, and grooming

Enteral feeding - An umbrella term used to describe various types of tube feeding that bypass the upper digestive tract and deliver nutrition to the stomach or small intestine; enteral feeding may include a nasogastric (NG) tube, percutaneous endoscopic gastrostomy (PEG) tube, nasojejunal (NJ) tube, radiologically-inserted gastrostomy (RIG) tube, or a jejunostomy

Level of care - A practice setting that offers various levels of medical, rehabilitation, and nursing services based on a person's health needs; from least restrictive to most restrictive, the levels of care are home healthcare, outpatient clinics, skilled nursing facilities, and acute rehabilitation

Medically necessary - A distinction describing healthcare services and equipment that meet the accepted standards of medicine; this care should be focused on the diagnosis and treatment of symptoms, injuries, illnesses, and chronic conditions

Medicare Part A - One of four aspects of a traditional Medicare plan that provides some coverage for inpatient care provided at hospitals and skilled nursing facilities

Ostomy - A medical device that diverts bodily waste from the digestive or urinary system into a bag worn and managed externally; the bag connects to a surgically-made opening called a stoma

Parenteral nutrition (TPN) - Feeding that takes place intravenously and bypasses the entire digestive system; someone gets parenteral nutrition if their digestive system cannot tolerate or absorb food eaten traditionally; this may be given temporarily or long-term depending on a person's needs

Prior level of function - A patient's baseline status that therapists use as a marker when forming goals for that individual; while the prior level of function can be within various timeframes and may or may not be reported by the patient, it's customary to refer to the patient's last qualifying hospital stay for this information

Skilled nursing care - A level of care offered by registered nurses under a doctor's supervision that is mostly akin to what is offered in acute care but is provided to patients with less severe medical concerns for a longer period of time; as part of skilled nursing care, patients may or may not receive skilled rehabilitation services based on their needs

Subacute care - A level of care that also involves skilled nursing and/or skilled rehabilitation services provided by licensed clinicians under a doctor's supervision; subacute patients are slightly more medically complex than those in skilled nursing but less severe than those in acute care

Section 2: Contextual Considerations in Skilled Nursing Facilities

References: 2, 6, 7, 8, 9, 10, 11, 12, 13, 14, 15, 16, 17, 18, 19, 20, 21, 22, 23, 24, 25, 26, 27, 28, 29

Occupational therapists working in skilled nursing facilities must be aware that a range of factors can impact the treatment they provide. These are known as contextual factors, and research shows they are significant determinants of rapid readmission to a skilled nursing facility after discharge. There are a number of factors that impact skilled nursing facility progress, including but not limited to:

- Patient demographics (age, gender, race/ethnicity, clinical conditions, education level)
- Clarity in the diagnostic and treatment process
- Social factors
- Patient expectations of, preferences for, and previous experience with care
- Perceived barriers to care
- A provider's professional reputation, appearance, beliefs, and behavior
- Actual barriers to care
- Perceptions of healthcare as a whole
- Verbal and non-verbal communication between patient and provider
- Vaccination beliefs and attitudes
- Organizational factors, including the culture, design, and layout of the SNF

Insurance coverage is one major contextual factor in healthcare. We mentioned earlier that a set of criteria must be met in order to achieve medical necessity for any given skilled nursing facility stay. Medical necessity is paramount across all practice settings firstly because it means the services should reasonably lead to positive results due to their basis of evidence. Insurers also draw the same conclusions from demonstrated medical necessity and, therefore, use that concept to determine reimbursement rates. The exact amount of coverage for skilled nursing facility stays varies between different insurance companies. Insurance companies negotiate these rates ahead of time in the early stages of their partnerships.

Skilled Nursing Facility Insurance Coverage

Many skilled nursing facility patients are Medicare recipients, and Medicare has a few chief rules for this type of coverage:

- Medicare will only cover skilled nursing facility care if that admission comes after a qualifying 3-day hospital stay. A qualifying 3-day hospital stay means the patient must be admitted to one or more hospitals for three consecutive days, not including the day of their discharge.
    - If a patient's primary care doctor participates in an Accountable Care Organization (ACO) or similar programs, they may be approved for a Skilled Nursing Facility 3-Day Rule Waiver. This waiver prevents patients from needing a 3-day hospital stay in order to be admitted to a skilled nursing facility.
- The patient's doctor must certify they need daily skilled care in order to be admitted to a skilled nursing facility after the aforementioned qualifying 3-day hospital stay.

- The patient's doctor must also testify that they are receiving skilled nursing services for a medical condition that began or worsened during the qualifying 3-day hospital stay. If Medicare is determining coverage for a continued skilled nursing facility stay, their condition must have begun or worsened while they were in the SNF.
- In order to receive Medicare coverage for a skilled nursing facility stay, the facility must be certified by Medicare.
- Patients who have Medicare will receive skilled nursing facility coverage for up to 100 days per year. This coverage is provided through Medicare Part A, which is intended to assist with inpatient stays including hospital and skilled nursing facility admissions. After day 100 of skilled nursing facility care, patients with Medicare are required to pay all costs incurred out of pocket.
    - Instead of saying 100 days of coverage per year, Medicare often uses the term 'benefit period' to track how many days of SNF benefits their patients have used versus how many are still available.
    - A patient's benefit period begins on the first day they receive inpatient care (at a hospital or a SNF). Once a patient hits the 100-day mark, their benefit period must end before they can start a new period.
    - A benefit period ends when a patient has not been in a hospital or SNF for at least 60 consecutive days OR when they remain in a skilled nursing facility but have not received skilled care within the facility for at least 60 consecutive days.
    - Once one benefit period ends, a patient must have another qualifying 3-day hospital stay in order to restart a separate benefit period. Patients can have an unlimited number of benefit periods.

- Patients with traditional Medicare plans will not have any copayments during the first 20 days of their skilled nursing facility stay. They will have $150-$200 daily copayments during days 20 to 100 of their skilled nursing facility care. Because Medicare members are required to have secondary insurance to supplement their coverage, those copayments are typically paid for by the patient's secondary insurer. Secondary insurance is offered through private companies such as Blue Cross Blue Shield and Humana.
    - If a patient does not have secondary insurance, they will be personally responsible for the fees they incur at a skilled nursing facility.
    - In some cases, patients may use long-term care insurance to cover additional skilled nursing facility stay after the initial 100 days.
    - Patients should be aware that most skilled nursing facilities will not inform them when they are nearing their 100-day limit, so patients and their caregiver(s) or family members should keep track of their admission lengths.
- If a patient disagrees with Medicare's decision to stop paying for skilled nursing facility coverage (which often leads a skilled nursing facility to discharge a patient from their care), they can appeal their case. Patients most often appeal their cases if their medical and/or rehabilitative statuses were not improving, but they still need skilled nursing care to avoid further decline.

Medicaid is income- or disability-based government health insurance that offers more skilled nursing facility coverage than Medicare does. While Medicare does not offer coverage for long-term care in skilled nursing facilities, Medicaid does. In

addition, there are less restrictions (such as time limits on coverage periods) on Medicaid coverage.

Discharge Planning

Since skilled nursing facilities are a form of inpatient care, therapists need to consider a patient's home environment, social supports, and discharge arrangements early in the treatment plan. These external supports can all have a major impact on a patient's course of treatment along with their ability to reintegrate into the community once they leave the SNF. Patients must have a solid discharge plan before returning home in order to prevent them from being readmitted to the SNF or a hospital.

As part of the discharge planning process, patients should have several accommodations in place before they leave the SNF. The skilled nursing facility is often a highly collaborative practice setting for providers, so therapists should work with nurse case managers, discharge planners, or social workers to plan for each of these items:

- Durable medical equipment (e.g. walkers, wheelchairs, canes, commodes, etc.) the patient needs to continue their recovery elsewhere
- Patient education
    - This should include aspects of the patient's health condition they will need to manage independently.
    - Patients with hypertension will likely be asked to monitor their blood pressure daily. Patients with diabetes will be asked to test their blood glucose levels multiple times each day. Patients with diabetes and/or a history of pressure ulcers may be asked to perform daily skin checks. In the event the patient cannot assist with disease

management due to physical or cognitive limitations, their caregiver(s) should be involved in the process.

    - Patients and their caregiver(s) may even need to be physically trained in some of the above practices or others such as changing bandages and giving themselves insulin injections.

- Care after discharge
    - Specific exercises or recommendations from SNF therapists
    - Additional rehabilitation and/or nursing services from home health agencies or outpatient clinics
    - Medical follow-ups with surgeons and/or specialists
    - Ability to pick up or arrange for delivery of prescription medications
- Assistance with self-care or household management
    - Patients may need rehabilitation to further assist with building self-care skills. Some patients who are continuing to deteriorate due to chronic conditions may not return to their PLOF. In these cases, SNF staff will need to arrange for home health aides to provide some or all self-care tasks. If family members are not able to assist with household management, some patients will need a caregiver, health proxy, or others to take over tasks such as paying bills, cleaning the home, and getting groceries.

Home Evaluations

The evaluation covers a lot of information about the patient's home environment, so therapists should have an idea of how many stairs there are outside and within

the home, where the bedroom and bathroom are, and what equipment the patient has at home. This information and more helps therapists appropriately prepare the patient for discharge. In some cases, the patient or their family may request a home evaluation to make them feel more comfortable about returning to this environment. Therapists may also complete a home evaluation if the patient's case is particularly complex or the patient (and their family or caregivers) do not reliably offer information about the discharge environment. Home evaluations allow therapists to observe any contextual barriers that may be present and can limit a patient's ability to resume their typical daily activities.

For example, let's say a patient is being discharged from a skilled nursing facility and still needs some assistance getting in and out of the tub. The therapist will need to know if anything will place them at risk of reinjury or readmission when they return home. Contextual factors that increase the likelihood of this happening include the only bathtub in the home being a tub/shower combination, not having any durable medical equipment in the bathroom, living alone, and not having any caregiver or family support. If the therapist does not get this information from the patient or their family, a home evaluation will be essential to a safe discharge plan for this individual.

Home evaluations are also quite important for those who still require a high level of assistance for transfers at the time of their discharge. For example, if a patient needs contact guard assistance (CGA) or minimum assistance (min A) to get in and out of their chair, the therapist needs to know there will be someone there to help with transfers when the patient returns to their home. While this is not a very strenuous task for the caregiver or family, it is still essential for the patient's safety, so therapists need to know this level of assistance is available to them before discharging the patient.

A SNF is required to notify a patient of their discharge from the facility between 20 and 30 days in advance of their discharge date. There are six reasons why a patient can be discharged from a SNF: the facility can no longer meet the patient's needs, the patient no longer needs SNF services, the patient's behavioral status poses a safety risk to other patients in the SNF, the patient poses a health risk to others in the SNF due to their medical status, the facility is closing, or the patient has not arranged payment for their services.

If a patient is going to be discharged because SNF services are no longer medically necessary, they must meet the following criteria:

- The patient is clinically stable.
- The patient has no signs or symptoms of infection or is clinically stable due to the implementation of an anti-infective regimen that can be offered through outpatient services.
- The patient continues to require skilled nursing and skilled rehabilitation services, but those needs can be met through outpatient centers or home healthcare.
- The patient is on and will continue following an adequate nutritional program that can be monitored through outpatient centers or home healthcare.
- The patient's pain levels are currently stable and being managed effectively without a need for frequent changes in medication type or dosage.
- The patient's neurological status has returned to or remains at the patient's baseline or is clinically appropriate considering their condition.
- The patient is not expected to make additional progress toward rehabilitation goals.

- The patient's remaining skilled rehabilitation needs can be met at a lower level of care through outpatient centers or home healthcare.
- The patient is no longer able or willing to participate in the outlined therapeutic treatment program, with or without modifications to the treatment plan.

SNF Discharge Settings

There are several places where patients may go following discharge from a SNF. It is most common for patients who are discharged from subacute units to return to their home where they can continue receiving services through outpatient centers or home healthcare. Most of these patients are middle-aged and often return to work as they did before their admission. In some cases, patients receiving standard SNF care will also return to their homes to continue services at a lower level of care.

However, many standard SNF patients are older and more medically complex. As a result, some of these patients' medical needs change so drastically over the course of their SNF stay that they could not return to their baseline level(s). Such a change typically means the patient will need more assistance than they did before entering the SNF. Not all patients have the external support, home environment, and financial resources that are often needed to accommodate this type of daily care. These patients may be discharged to a long-term care facility, an assisted living facility, or a group home.

Individuals receiving traditional skilled nursing services may be discharged to another portion of the same facility when they are done with their stay. This is because some SNFs have units, wings, or additional buildings for long-term care residents. Just as skilled nursing patients must demonstrate medical necessity for the care they receive, LTC residents also must possess this in the form of a

justification letter from their primary care physician. This is the main requirement to enter a long-term care facility, since LTC residents do not have nursing needs and facility staff provide assistance with IADLs, ADLs, and medication management. Patients within this level of care may also receive occupational, physical, and/or speech therapies if they demonstrate deficits and have rehabilitation potential to remedy these concerns.

In order to qualify for residence in an assisted living facility, individuals must require assistance with at least two ADLs, transfers, continence care, or IADLs. Individuals in assisted living facilities can and typically do receive skilled nursing services, some rehabilitation services, and help with medication management. If an individual needs extensive medical care, continuous monitoring (24/7 or close to it), and/or specialized services related to significant memory concerns, they will not be able to live in an ALF. In addition, individuals who are non-ambulatory also cannot reside in this setting.

Group homes are another option for individuals who are being discharged from a SNF. Group homes are residential facilities for individuals with disabilities who do not require advanced medical care but also are not able to live alone. Group homes differ from other long-term care facilities in that they are typically smaller and more personal than other accommodations. This type of setting offers joint or private bedrooms along with several shared spaces for residents. Many times, group homes are set up in large multi-family homes, which is how their name came about. Group homes also offer residents a higher level of engagement within the community than many other long-term care facilities do.

Infection Control

Skilled nursing facilities must place infection control as a top priority. One of the main reasons is that inpatient care facilities often house large groups of

individuals. In addition, many older adults spend time in SNFs, and this population is particularly at risk of communicable diseases due to the impact aging has on the immune system. AOTA research has also found that infection control led skilled nursing facility patients with cognitive deficits to experience a higher risk of occupational injustices. Older adults are at risk of infections due to a range of bodily changes, health concerns, and medication side effects. Some examples include:

- Open wounds
- Cracked, broken skin
- Difficulty drinking, chewing, and/or swallowing
- Impaired mobility
- Incontinence
- Cognitive changes such as impaired memory or limited safety awareness
- Medical conditions of any severity
- Relying on external medical devices such as intravenous lines or catheters
- Inadequate nutrition
- Taking medications such as biologics or corticosteroids
- General inability to wash hands or practice deep breathing techniques

Healthcare-associated infections (HAI) impact nearly 1.7 million Americans each year and lead to just under 100,000 deaths annually. Four medical concerns are responsible for nearly three-quarters of all HAIs. Urinary tract infections (UTIs) along with surgical site infections (SSIs) and other skin/soft tissue infections each account for 22% of all HAIs. Lower respiratory infections (predominantly

pneumonia resulting from ventilator use and influenza) are responsible for 15% of HAIs in the United States. Lastly is bloodstream infections related to central line placement, which totals 14% of HAIs.

HAI are largely preventable, which is why governing bodies place such an emphasis on infection control measures. There are several ways therapists can help with early identification (and treatment) of infections. Firstly, therapists should be able to identify the signs and symptoms of infections such as redness, swelling, pus or other foul-smelling discharge coming from wounds, a high fever, excessive coughing, vomiting, and diarrhea. Therapists should also ask patients how they are feeling regularly so they have an idea of what their normal presentation is. If therapists suspect patients have an infection of any kind, they should report this to their therapy supervisor along with the patient's nurse so they can take action swiftly.

Patients in skilled nursing homes are also at risk of multidrug-resistant organisms. These organisms develop from bacteria and other foreign bodies that have developed a resistance to antibiotics and other medication-related treatments. Some examples of multidrug-resistant organisms are methicillin-resistant staphylococcus aureus (MRSA), clostridium difficile (C. diff), vancomycin-resistant enterococcus (VRE), carbapenem-resistant enterobacteriaceae (CRE), and extended spectrum beta lactamase (ESBL) bacteria.

In order to prevent the occurrence and spread of HAI and multidrug-resistant organisms, therapists should follow some basic best practices:

- Using standard precautions for all patients
    - Using personal protective equipment (PPE), such as gloves, gowns, masks, face shields, and eye protection, according to facility policies

        - Each piece of PPE is single-use and should be changed between patients
        - Perform hand hygiene before putting gloves on and after taking them off
        - Change gloves any time they are visibly soiled
    - Practicing good hand hygiene
        - When hands are visibly soiled, clean with soap and water for at least 20 seconds
        - When hands are not visibly soiled, clean regularly with an alcohol-based hand rub or alcohol-based hand wipe and be sure to cleanse all surfaces of the hands
        - Dry hands thoroughly each time after washing them
        - After washing hands, use paper towels to turn off faucets after drying hands with them
        - Ensure these procedures are posted near all sinks and other hygiene stations
        - Replenish all PPE and other materials needed to consistently practice good hygiene
    - Covering your mouth and nose whenever coughing or sneezing followed by practicing hand hygiene
    - Disinfecting surfaces and all medical equipment in between patients

        - Some cleaning products also require providers to wear gloves, so be sure to change those gloves when moving between two contaminated surfaces
        - Follow the manufacturer's instructions for each cleaning product for the optimal effect
- Keeping your own fingernails trimmed
- Avoiding wearing jewelry, especially rings, since they can transfer germs and cause runs in gloves or get caught on medical equipment
- Ensuring providers' own wounds or cuts are covered with some sort of dressing and the same applies to their patients
- Following contact isolation precautions when they are in place
    - In addition to standard precautions, patients should:
        - Wear gloves and a gown before coming into contact with the patient, their objects, or surfaces in their immediate vicinity
        - Disinfect all medical equipment, therapy tools, or other reusable items taken into the patient's room or used by the patient before removing from the area
        - Immediately and properly dispose of all single-use items after the patient or provider are done with them
- Wearing gloves during patient encounters where you will be in contact with non-intact skin, mucous membranes, blood, or other bodily fluids
- Instructing patients about the importance of completing an entire course of antibiotics when they are prescribed to them, since this helps prevent drug resistance

- Avoiding touching your face
- Calling out of work when sick, especially with contagious illnesses
- Maintaining current vaccinations that are recommended for healthcare providers (Hepatitis B; varicella; influenza; measles, mumps, and rubella or MMR vaccine; tetanus, diphtheria, and pneumococcal or TDAP vaccine)
- Handling medical waste safely and in accordance with facility policies
- Educating patients on proper hygiene
    - Instruct patients to clean their hands after using the bathroom and before eating
    - Inform patients how to cover their mouths and noses when coughing or sneezing
    - Teach patients the basics about oral care, hand hygiene, hair care, and grooming
    - Relay to patients the importance of various vaccines and the impact aging has on the immune system
    - Emphasize the importance of healthy foods (with examples), fluid intake, and rest to help bolster the immune system

Additionally, research supports the idea of infection control being integrated into the organizational culture for more effective changes in the short-term and long-term. In fact, beginning during the COVID-19 pandemic, the Centers for Medicare and Medicaid Services (CMS) now require all skilled nursing facilities to have an infection preventionist on staff to assist with infection control and prevention measures. Research conducted early in the COVID-19 pandemic looked at the amount of skilled nursing facilities who were compliant with COVID-19 regulations

and general infection control procedures. Results found that 41% of skilled nursing facilities in the United States received at least one citation for not adhering to infection control procedures. Between 2019 and 2020, 15% of skilled nursing facilities across the nation were cited more than once for infection control-related matters. The lowest number of citations were in North Carolina (20%) and the highest were in West Virginia (79%).

This study also found skilled nursing facilities that received two or more infection control deficiencies were more dependent on Medicaid for reimbursement and also served patients with a higher clinical acuity. Organizations with two or more citations also proved to have a more comprehensive scope of infection prevention concerns to manage. Another study discovered skilled nursing facilities with a higher rate of staff turnover were more likely to be cited for infection control policy violations.

Section 2 Personal Reflection

What might an occupational therapist's role be relative to infection control in a skilled nursing facility?

Section 2 Key Words

Accountable Care Organization (ACO) - A group of hospitals, doctors, and other healthcare providers who partner to offer a higher standard of care for Medicare patients

Biologics - A class of prescription medications that suppress the immune system in an attempt to minimize the production of proteins responsible for inflammation; biologics may be prescribed for autoimmune disorders such as rheumatoid arthritis or Crohn's disease

Contact guard assistance (CGA) - A level of assistance where a caregiver or therapist places one or two hands lightly on the patient to steady them, but offers no other assistance for mobility or transfers; this level of assistance is one step higher than minimum assist and one step lower than supervision or standby assist

Contextual factors - Aspects of a therapy, nursing, or medical plan of care that influence the way the care is provided and received; contextual factors may be environmental/external (manmade, cultural, political, social, economic, temporal, sensorial, etc.) or personal/internal (mental, physical, cognitive, etc.)

Corticosteroids - A class of prescription medications that provide the body with synthetic hormones when the adrenal glands are not producing such hormones; corticosteroids are prescribed for a range of conditions from asthma, rashes, and eczema to multiple sclerosis, cancer, and lupus

Healthcare-associated infections - A infection that individuals can get when they spend time in a hospital, SNF, LTC facility, or other inpatient care setting that provides medical services

Healthcare proxy - An individual who is assigned to make healthcare decisions for those who lack the cognitive and/or communication skills to do so on their own; a healthcare proxy may also be known as a healthcare representative, a healthcare agent, or a healthcare surrogate

Minimum assistance (min A) - A level of assistance where a caregiver or therapist offers 25% assistance to the patient for mobility, transfers, and other types of help while the patient completes 75% of the task on their own; this level of assistance is one step higher than moderate assist and one step lower than contact guard assist

Personal protective equipment - Equipment that professionals wear to decrease their exposure to occupational hazards that may cause work-related injuries and illnesses

Reimbursement rates - Payment that insurance companies give healthcare providers or healthcare organizations in exchange for the provision of medical services; there are various reimbursement methods including bundled payments and capitation, but the most common is fee-for-service (FFS)

Section 3: Common Clientele and Related Treatment in Skilled Nursing Facilities

References: 30, 31, 32, 33, 34, 35, 36, 37, 38, 39, 40, 41, 42, 43, 44, 45

Occupational therapists may encounter virtually any diagnosis when treating in a skilled nursing facility due to the wide range of patients who receive rehabilitation in this setting. However, there are a group of diagnoses most commonly seen in SNFs. This is due in part to the age groups this setting serves and is also a reflection of the current health trends in our society. Research from the Centers for Disease Control and Prevention (CDC) shows that individuals who stay in short-term units of a SNF are more likely to be females over the age of 65 who struggle with one or more ADL areas.

Long-term residents of SNFs are most often non-Hispanic white females over the age of 85 with an average stay totaling 22 months. Most LTC residents have deficits in three or more ADL areas, which they require continual assistance with. Medicaid offers reimbursement for around 20% of long-term care residents.

This same literature states that 36.9% to 40% of all SNF residents (both short-term and long-term) have severe cognitive impairments while 24.9% of those in SNFs have moderate cognitive impairments and 38.2% have mild cognitive impairments

or no cognitive concerns at all. While there are very few SNF patients under the age of 65, most individuals who do present in this age range have needs related to traumatic brain injuries, substance use disorders, and psychiatric conditions.

The CDC conducts research on the classifications of patients who receive care in SNFs. The most recent study from them took place in 2010, and outlines specifics regarding the diagnoses of most patients who stay in SNFs:

- High blood pressure (57%)
- Dementia (42%)
- Heart disease (34%)
- Depression (28%)
- Arthritis (27%)
- Osteoporosis (21%)
- Diabetes mellitus (17%)
- Chronic obstructive pulmonary disease (15%)
- Cancer (11%)
- Stroke (11%)

It is important to note that these diagnoses are rarely presenting problems that led to a patients' hospitalization and SNF admission. Instead, these percentages reflect the amount of patients in a SNF that have such diagnoses. For example, it is very uncommon for someone to be admitted to the hospital and then a SNF just to manage high blood pressure. But hypertension is a common condition that co-occurs with other health concerns that may lead someone to be admitted to a SNF. This study also found that 18% of patients in SNFs had at least one chronic

health condition, 50% of SNF patients were living with 2-3 chronic health conditions, and 26% of individuals in SNFs had 4-10 chronic conditions.

In addition, this research also looked at the most common presenting conditions that led to patients' SNF admissions:

- Amputations
- Burns
- Chronic obstructive pulmonary disease
- Complications related to or exacerbations of chronic conditions (most notably diabetes mellitus, multiple sclerosis, Parkinson's disease, dementia, and cancer)
- COVID-19
- Major surgery
- Multiple fractures secondary to falls, car accidents, or other significant physical trauma
- Severe infections such as pneumonia, sepsis, septicemia or other bloodstream infections
- Spinal cord injury
- Stroke
- Traumatic brain injury

As mentioned earlier, many of the diagnoses outlined in the CDC's research covered conditions that were the major cause of admission across all SNF patients. A study conducted by Definitive Healthcare looked at the most common

admitting diagnoses for Medicare recipients across 20,000 SNFs. These diagnoses included:

- COVID-19 (9.33%)
- Metabolic encephalopathy (3.30%)
    - Metabolic encephalopathy is a neurological condition someone may develop as a result of chemical imbalances in the bloodstream. This condition may come about from severe exacerbations of chronic conditions such as heart disease, diabetes, renal failure, and respiratory failure.
- Urinary tract infection (2.92%)
- Aftercare and rehabilitation following a joint replacement surgery (1.81%)
- Sepsis (1.74%)
- Pneumonia (1.73%)
- Parkinson's disease (1.64%)
- Aftercare and rehabilitation following an orthopedic procedure (1.63%)
- Encephalopathy (1.60%)
- Chronic obstructive pulmonary disease (1.54%)
- Acute respiratory failure with hypoxia (1.53%)
- Stroke (1.49%)
- Dementia without behavioral disturbances (1.07%)
- Muscle wasting and atrophy (.95%)
- Hemiplegia and hemiparesis (.92-.83%)

- Acute kidney failure (.87%)
- Fracture of the femur (.84%)
- Aftercare and rehabilitation following surgery on the digestive system (.82%)
- Aftercare and rehabilitation following one or more surgical amputation(s) (.77%)
- Displaced fracture of the femur (.76-.71%)
- Heart failure (.74%)
- Atrial fibrillation (.68%)
- Congestive heart failure (CHF) (.59%)
- Chronic respiratory failure with hypoxia (.59%)
- Rhabdomyolysis (.58%)
    - A medical emergency that occurs when someone has damaged muscle tissue that releases an excess of electrolytes, proteins, and waste materials into the bloodstream. These materials cannot be fully processed by the organs (specifically the kidneys and the heart) and can cause lasting damage if not addressed in time. Rhabdomyolysis can occur due to crushing injuries, overexertion, medication side effects, or underlying medical conditions. In particular, older adults are at risk of rhabdomyolysis if they experience a long lie time after a fall that results in injury.
- End stage renal disease (ESRD) (.54%)
- Myocardial infarction (MI) (.52%)

Group Therapy vs. Individual Therapy

There are a range of treatments therapists can use to rehabilitate patients with these health concerns. OTs commonly focus treatment on helping patients build physical, cognitive, and emotion regulation skills, depending on their needs. This may be done in individual or group therapy sessions, since skilled nursing facilities are one setting where both formats are commonly used. Therapists can treat patients bedside and within their rooms to address ADL- and other occupation-related concerns in a private, secure space. OTs can also take patients to the rehabilitation gym for more exercise-based aspects of treatment. This is also where therapists may engage patients in group therapy.

Therapists must keep in mind who is most appropriate for group therapy before planning this type of treatment. As with regular treatment, all group therapy services must be skilled as well as medically necessary for all patients involved. Therapists should also try to form smaller groups with lower functioning patients, since they can benefit from more attention in a group setting. However, therapists may enhance the psychosocial benefits of group sessions by placing patients in different stages of their rehabilitation journey together. This can help instill and maintain motivation and allow patients to interact with others who share their lived experience(s) of one or more conditions.

For example, a group of 2-3 patients may be beneficial for those who suffered a stroke and demonstrate mild to moderate communication deficits. A group setting of this caliber would encourage patients to socialize while going about their activities without causing too many distractions or overstimulation. Group therapy settings like this also offer patients the opportunity for connection, which can ease symptoms of depression and anxiety that may be present after a major illness or injury. Group therapy settings are not ideal for patients with significant behavioral

concerns, those who report homicidal ideation, or anyone with a history of violence toward others.

In addition to being mindful of several clinical indications for group therapy versus individual therapy, therapists should also keep insurance guidelines in mind when planning such therapies. The current payment model in SNFs is PDPM, also known as the Patient-Driven Payment Model, which was implemented in October 2019. According to PDPM, group therapy in SNFs can consist of between two and six patients who are all performing the same or similar tasks and are led by a therapist or a therapy assistant. Therapists must remember that, while the tasks within group therapy sessions must be the same or similar, they can relate back to whatever goals are outlined in a patient's plan of care. These stipulations allow therapists to use their clinical judgment when forming groups to more efficiently meet productivity standards and address patient goals in tandem. In addition, this set of guidelines keeps SNF group therapy regulations in alignment with group therapy criteria in inpatient rehabilitation facilities (IRF) such as acute care. This eases the administrative burden on insurance companies and organizational leadership alike.

Group therapy should not be confused with or overlap with concurrent therapy, which is when a therapist or therapy assistant simultaneously treats two patients who are doing different activities. For both concurrent and group therapies, the provider must be constantly visible to all patients they are treating. Concurrent therapy is most appropriate for patients who are nearing skill mastery of activities they are very familiar with, close to discharge, and/or do not require hands-on assistance for safety concerns.

Research shows that in 2018 (before PDPM came into play), less than 3% of patients in skilled nursing facilities received care through multi-participant therapy. However, evidence showed that up to 25% of multi-participant therapy

could be considered effective. Since PDPM went into effect, between 20 and 25% of treatment in SNFs is classified as multi-participant. Studies also show that the organizational qualities of a SNF are more closely related to the amount of multi-participant therapy they provide than patient factors are. For example, for-profit SNFs, facilities that provide high volumes of therapy, and SNFs that employ more contractors and therapy assistants than therapists are more likely to provide multi-participant services than other organizations are. This same study found that low amounts of multi-participant therapy produced 14% more functional outcomes and a 10% greater possibility of discharge to the community in skilled nursing facility patients. SNF patients who received moderate amounts of multi-participant therapy experienced 18% greater functional outcomes and were 44% more likely to discharge to the community. This study did not find any associations between high levels of multi-participant therapy and these same outcomes.

Other evidence explored the efficacy of group therapy led by OTs in skilled nursing facilities. Specifically, the study looked at group protocols with a strong basis of evidence and a focus on cognitive skills, strength, flexibility, balance, occupational performance (primarily self-care engagement), and fine motor dexterity. Results showed that these sessions yielded statistically significant improvements in self-care skills, which lends support to the efficacy of occupation-based group sessions.

Occupational Therapy Treatment Aspects in SNFs

In addition to helping patients learn and practice new skills, therapists must also maintain a focus on comprehensive care through early identification of acute concerns, care coordination, and interdisciplinary communication. Each of these aspects help therapists reduce patient readmissions. Experts suggest that some of the most pivotal areas OTs should address in SNFs include functional cognition,

vision, ADLs, instrumental activities of daily living (IADLs), fear of falling, psychosocial needs, and personal safety.

Another pivotal role of occupational therapy is health education, which includes both patient and caregiver/family education. This is especially crucial if patients were recently diagnosed with a chronic condition. In many cases, therapist education in SNFs will involve lifting techniques for caregivers, therapeutic exercises to be completed as part of a home program, and management techniques to assist with minimizing the impact of symptoms. Therapists may also educate patients and their support systems about assistive technology, durable medical equipment, and/or environmental modifications to help with their condition and encourage independence. Sometimes, caregiver education may also be relaying or clarifying aspects of a patients' care to them and their family members.

For example, while medical professionals are supposed to use lay man's terms when speaking to patients and their family, this does not always happen. Unfortunately, it's especially common for doctors to use complex terms that patients and their families do not understand, which is why these parties may come to therapists and similar staff members with questions. Therapists may not necessarily have specifics about the events that led up to a patient's SNF stay or hospitalization, but they can break down the diagnoses, medical procedures, and aftercare for patients and their families. This may mean informing family members that a fractured ulna means a broken forearm, but it can also include aspects of the patient's prognosis, such as mental health concerns that may follow a severe stroke or another condition. Therapists may also need to prepare family members for discussion surrounding death, which may be the case for patients with cancer, widespread sepsis, or other terminal diagnoses. While such conversations can be very difficult, therapists should know that this responsibility often falls to nurses or care managers. However, therapists should be ready and able to respond to

patients and their families if they are approached with sensitive questions. If therapists are not privy to this information due to rapidly changing circumstances, they should refer patients and their family members to another provider in the interdisciplinary team who knows more about the specifics.

A large systematic review showed that occupational therapists who work in skilled nursing facilities report frequently using therapeutic exercise and rote practice as fixtures in their treatment sessions. About half of all therapists in this setting cite occupation-centered interventions as the focus of the services they provide. While occupation-based interventions are central to the profession as a whole, this type of care is also what makes occupational therapists unique and what allows their work to be deemed effective in many ways. Research shows there are various health outcomes associated with treatment focused on occupation and functional performance. This fact is a good rationale for therapists in all practice settings to make occupation the center of their treatment. However, OT services in skilled nursing facilities must especially focus on occupation since this is what will prepare individuals for returning to their homes, reentering the community, and resuming both preferred and necessary tasks. Additional research supports the connection between comprehensive, occupation-based OT, interdisciplinary care, and improved health outcomes for individuals with COVID-19 who are admitted to a skilled nursing facility.

Another somewhat controversial topic in the rehabilitation field is the delegation of treatment for upper and lower body concerns. While this has long been an item of discussion between OTs and PTs in nearly every practice setting, this issue is especially present in skilled nursing facilities and long-term care homes. Research found that 94.2% of rehabilitation departments in skilled nursing facilities have unofficially assigned these responsibilities according to antiquated assumptions of each profession's scope of practice. Therapists who were surveyed overwhelmingly supported the idea of OTs evaluating, then treating upper

extremity pathologies and PTs nearly exclusively evaluating, then treating lower body concerns. Many experts are unsure why this division exists, but it may stem from a sort of abbreviated definition of each profession that has evolved over the years. In light of this research, occupational therapists should not allow such beliefs to limit the focus of their care. Rather, it's more appropriate for OTs to base their treatment on a patient's evaluation and occupational profile, since these tools allow therapists to identify their patients' most salient needs.

Section 3 Personal Reflection

What are some areas that occupational therapists can address through group treatment in skilled nursing facilities?

Section 3 Key Words

Concurrent therapy - A type of rehabilitation treatment that involves one therapist or therapy assistant providing care for more than one patient working on different tasks at the same time; this therapy is most appropriate for patients who are nearing discharge or are close to mastering a certain skill

Group therapy - A type of rehabilitation treatment that involves one therapist or therapy assistant providing care for 2 to 6 patients who are working on the same or similar tasks; this therapy may be used to address various patient goals at the same time

Long lie time - When someone is left on the ground for an extended period of time after a fall that resulted in injury

Multi-participant therapy - A category of rehabilitation treatment that includes group therapy and concurrent therapy

Patient-Driven Payment Model (PDPM) - A payment model that Medicare uses to encourage patients' functional improvements through reimbursement incentives specifically in skilled nursing facilities; PDPM is used for rehabilitation services (PT, OT, SLP) along with non-therapy ancillary services (these are either diagnostic, therapeutic, or custodial in nature), and nursing

Rote practice - A memorization technique strongly based on repetition

Section 4: Orthopedic Patients in Skilled Nursing Facilities

References: 46, 47, 48, 49, 50, 51, 52, 53, 54, 55

If you recall the list of diagnoses most often seen in SNFs, you know that orthopedic health concerns are a common health concern in this practice setting. More specifically, patients often continue their rehabilitation in SNFs after undergoing orthopedic procedures in the hospital. Some of the most prevalent orthopedic procedures are joint replacements, but patients may also come to SNFs to recover from the surgical repair of fractured bones, ligament reconstruction, spinal fusion, cervical decompression surgery, and more.

Occupational therapists must complete certain standardized assessments for patients with orthopedic concerns. As in acute care settings, the evaluation process in skilled nursing facilities is quite streamlined for the sake of time. This practice area typically has a high number of patients needing care, so priority is given to simplistic yet effective assessments. Some standardized assessments that are central in the SNF evaluation process for orthopedic patients include:

- Activity Measure for Post-Acute Care (AM-PAC)
- Berg Balance Scale (BBS)

- Borg Rating of Perceived Exertion (Borg RPE) Scale
- Five Times Sit to Stand Test
- Fugl-Meyer Assessment - Upper Extremity
- Functional Reach Test
- Functional Independence Measure (FIM scale)
- Katz ADL Scale
- Manual muscle testing (MMT) grades
- Mini Mental Status Exam (MMSE)
- Modified Barthel Index (MBI)
- Range of Motion (ROM) measurement
- Timed Up and Go (TUG)
- Tinetti Falls Efficacy Scale

Hip Replacement Precautions

Patients recovering from orthopedic procedures typically have precautions that the interdisciplinary team must be aware of. These precautions impact both the evaluation and treatment processes, which is why therapists should be aware of them to inform their own actions and so they can educate patients about movements and activities to avoid. There are several types of movement precautions in place for individuals who underwent hip arthroplasty (also known as hip replacement) depending on the surgical approach the patient's doctor used. Posterolateral hip replacements are performed by cutting through posterior muscles (primarily the gluteus maximus, external rotators, and associated fascia).

Some literature says the posterolateral approach has a higher risk of dislocation, but this is not a widely accepted belief. Patients who are recovering from a posterolateral hip replacement must avoid hip flexion, hip adduction, and internal rotation. As such, several precautions are in place that state patients must not:

- Bend the hip more than 90°
- Cross the feet or legs
- Log roll before the 6-week mark
- Lie on the unoperated side before the 6-week mark
- Twist the upper body when standing
- Sleep on one's stomach, side, or the fetal position before the 6-week mark
- Bathe without a shower chair or other elevated seat for the first 8 to 12 weeks after surgery
- Put socks, shoes, and underwear on without assistive devices before the 6-week mark

Many surgeons in recent years use the direct anterior (DA) approach for hip replacement, which involves operating superficially between the tensor fasciae latae and the sartorius muscles and, on the deep side, between the gluteus medius and the rectus femoris. The DA approach comes with a lower risk of dislocation, but has a higher risk of wound complications (specifically in those with obesity) and paresthesias related to implication of the lateral femoral cutaneous nerve. This approach does not impact hip abductors, which is why there are no precautions related to that musculature. Those recovering from DA hip replacement have less restrictions compared to those who underwent other techniques, but still must avoid hip extension and external rotation. During the DA rehabilitation period, precautions state patients should not:

- Step backwards with their operated leg
- Turn their operated leg outward
- Cross their legs
- Log roll without placing a pillow between their legs
- Sleep on their operated side

It's important to note that emerging research shows many patients may experience unnecessary anxiety related to hip precautions, which can negatively impact their recovery. Similar sources state hip precautions provide little to no benefit during the rehabilitation process. One study found that 44% of orthopedic surgeons prescribed precautions for their patients after hip replacement while around 33% of surgeons did not offer any such guidance. This new trend may be due in part to surgeons moving away from the posterolateral approach and more often utilizing the DA approach.

Hip Fracture Precautions

There are not quite as many precautions in place during the early days after a hip fracture. However, individuals recovering from a hip fracture should avoid some similar movements while they are healing. Patients with hip fractures should not:

- Begin walking or stair exercises until 4-8 days after the injury
- Cross their legs
- Lift or push heavy objects for the first 1-3 months after injury
- Sit for long periods of time for the first 1-3 months after injury
- Reach excessively, stoop, or jump for the first 1-3 months after injury

- Sit with poor posture (twisted or misaligned legs, bending over

Knee Replacement Precautions

Individuals who are recovering from total knee replacements must also follow precautions. These patients must not engage in the following movements for at least 4-6 weeks:

- Twist, pivot, or kneel on the operated leg
- Apply any heat source to the operated leg
- Use their opposite leg, a sheet, or any other device to lift or otherwise move their operated leg
- Lay down without elevating their operated leg above their heart

Knee Fracture Precautions

While knee fractures are not very common, they may occur and require similar precautions during the rehabilitation process. Patients recovering from knee fractures should not:

- Squat or bend for the first 4-6 weeks after the injury
- Use stairs for the first 4-6 weeks after the injury
- Bear weight on the affected knee without wearing a brace for 4-6 weeks

Ankle Fracture Precautions

People who fracture their ankle often have stricter precautions than those recovering from hip or knee fractures because this joint bears so much of a person's body weight. Patients recovering from ankle fractures should not:

- Lay in bed without elevating their leg above their heart for the first week after the injury
- Sleep without wearing a boot or brace for the first 3 weeks after injury
- Bear weight on the affected ankle until 4-6 weeks after injury
    - This starts with 25% weight bearing while wearing the boot and increases by 25% every 1-2 weeks until the patient is fully weight bearing in their boot
- Transition to an air cast or normal shoe until 6 to 8 weeks after injury

Shoulder Replacement Precautions

Patients who just underwent total shoulder replacements or reverse shoulder replacements should not:

- Lay down without some support (a small pillow or rolled up towel) under their elbow to prevent hyperextension
- Engage in any active shoulder motion up until the 4-week mark
- Lift any objects with the operated arm until the 6-week mark
- Reach for rear pockets, put on a belt, don/doff a bra, or make any other shoulder motions behind the back until the 4-week mark
- Excessively stretch the shoulder across one's body until the 4-week mark

- Support their body weight with the operated arm until the 4-week mark
- Drive until the 6-week mark (or longer based on their doctor's advice)

Spinal Surgery Precautions

Patients recovering from spinal surgeries (spinal decompression, lumbar fusion, and other similar procedures) should not:

- Bend over, twist their body, lean back, or engage in other movements that involve spinal flexion, extension, or rotation for 2-6 weeks after surgery
    - This means patients must log roll to get out of bed during their initial recovery
- Extend their trunk more than 10 degrees, bend, twist, or squat until the 8-week mark
- Lift any objects over 15 pounds until the 12-week mark
- Sleep on their stomach
- Engage in any high-impact activities (such as running and jumping) for 12 weeks
- Sit for any longer than 30 minutes at a time

Occupational Therapy Interventions for Orthopedic Concerns

OTs can address a range of occupational areas for individuals recovering from joint replacements, joint fractures, and other orthopedic concerns. As we mentioned before, one of the central focuses of intervention in this setting is building or restoring self-care skills. In order to do this, therapists help patients by increasing their strength, range of motion, balance, coordination, and endurance.

Since there are so many movement restrictions in the early stages of orthopedic rehabilitation, therapists also provide and educate patients in the use of assistive devices (specifically adaptive equipment) and durable medical equipment. OTs may use any of the following durable medical equipment and adaptive equipment while treating patients with orthopedic concerns in SNFs:

- Sock aid
- Dressing stick
- Long-handled shoe horn
- Button hook
- Reacher
- Long-handled sponge
- Soap on a rope
- Elastic shoelaces
- Weighted eating utensils
- Large-grip eating utensils
- Non-skid food bowl
- Plate guard
- Scoop dish
- Extendable straw
- Tub bench
- Shower chairs

- Handheld shower head
- Grab bars
- 3-in-1 commode with or without removable arms
- Raised toilet seat
- Tub mat
- Transfer board
- Mechanical lift
- Bed bar

Several pieces of research identify important aspects of OT treatment for orthopedic conditions. One OT-led study looked at commonalities across all patients being treated for hip fractures in SNFs. Results showed that occupational therapists in this setting overwhelmingly place focus on completing an occupational profile, offering occupation-based intervention during SNF care, and connecting patients with services that allow them to continue addressing occupation-focused goals after discharge. Another systematic review honed in on the effectiveness of OT services for individuals about to undergo hip replacements. This review found that most patients experienced functional gains and improvements in pain as a result of pre-operative OT, but these gains were often not sustained after surgery.

Another study looked at disparities in residential orthopedic treatment for individuals who have intellectual and developmental disabilities (IDD). Results showed that patients with IDD who were being treated for orthopedic concerns experienced longer lengths of stay in hospitals and were more likely to be discharged to a SNF afterwards. While the orthopedic treatment for these patients was mostly the same, outcomes differed due to variable use patterns that were

linked to client factors and contexts. This is an important consideration for therapists to be aware of, as IDD is just one condition that can impact a therapy plan of care for musculoskeletal conditions.

One dated study found that orthopedic patients in skilled nursing facilities experienced different outcomes based on their insurance type. When compared to patients with fee-for-service insurance, individuals with managed care had better health outcomes four months after being discharged from skilled nursing facilities. While many factors can impact a patient's outcomes, insurance is certainly a large predictor and clearly has an impact on the long-term progress of those rehabilitating from orthopedic conditions.

Other research shows that patients undergoing joint replacement surgeries experienced better outcomes and generated lower costs when they received care at a preferred skilled nursing facility compared to those who went to non-preferred SNFs. Patients in non-preferred SNFs for post-joint replacement rehabilitation also had a higher length of stay and a higher readmission rate than those in preferred facilities.

Another study looked at the demographics of patients who underwent a knee replacement and were discharged to a SNF after their hospitalization. This study found that most individuals in these circumstances had comorbidities such as drug misuse, psychoses, neurological disorders, and depression. In addition, patients who continued knee replacement rehabilitation at a SNF had a 17% longer length of stay than individuals who were admitted to SNFs for other reasons. These patients were also more likely to experience complications related to their surgery. Therapists should keep this evidence in mind since each of these results details factors that can majorly impact the plan of care for individuals with orthopedic concerns.

Section 4 Personal Reflection

How can therapists provide more client-centered care to patients who are discouraged about needing to extend their time in residential rehabilitation?

Section 4 Key Words

Adaptive equipment - A category of assistive devices that includes modifications to traditional equipment or tools for the use of those with injuries or disabilities; for example, a long-handled shoe horn is an extended version of a standard shoe horn that helps those with difficulty bending or reaching

Durable medical equipment - A type of medical equipment that is designed to withstand very frequent use by individuals with disabilities or recovering from injuries; this category includes larger equipment such as hospital beds, walkers, wheelchairs, oxygen tanks, and more

Section 5: Neurological Patients in Skilled Nursing Facilities

References: 56, 57, 58, 59

OTs working in SNFs also commonly treat individuals with neurological disorders. Some patients in SNFs undergo rehabilitation after a new neurological disorder such as a recent stroke, while other patients may have been hospitalized and subsequently transferred to a SNF due to an exacerbation of a chronic neurological condition. Some neurological conditions therapists may see in SNFs include Parkinson's disease, multiple sclerosis, and spinal cord injuries. In some cases, therapists may treat patients as part of end-of-life care, shortly before they or their families make the decision to enter hospice. This means therapists may see patients with end-stage conditions such as cancer, kidney disease, chronic

obstructive pulmonary disease (COPD), and congestive heart failure. In a traditional sense, these conditions are not classified as neurological disorders. However, when they have progressed to become end-stage, they can cause individuals to experience a large decline in cognitive function and present as some neurological conditions do.

Many assessments used for orthopedic concerns can also be used to determine a baseline and measure progress for those with neurological disorders. There are also other assessments that can help individuals recovering from stroke and other similar conditions:

- Arm Activity Measure
- Brief Cognitive Rating Scale
- Chedoke Arm and Hand Activity Inventory
- Finger-Nose Test
- Jebsen Hand Function Test
- Montreal Cognitive Assessment (MoCA)
- Motor Evaluation Scale for Upper Extremity in Stroke Patients
- Postural Assessment Scale for Stroke
- Semmes-Weinstein Monofilaments
- St. Louis Mental Status Examination (SLUMS)
- Wolf Motor Function Test

Stroke Rehabilitation in SNFs

Therapists working in SNFs need to be familiar with treating individuals recovering from stroke. Specific interventions will vary based on the severity and distribution of a patient's symptoms. Patients who experienced severe strokes (specifically those that impact active movement, motor control, and sensation) will need assistance with stretching, active-assisted movement exercises, and positioning first and foremost. Positioning is a major safety concern for this population primarily because ergonomic positions prevent contractures from developing. In addition, therapists must also address positioning because proper postures are safe and prevent further injury that can develop due to poor body awareness (such as subluxated joints and pinch injuries). In the early stages of treatment, therapists will also address stretching to assist with contracture prevention and prepare patients for active-assisted exercises. Therapists can train patients in the practice of active-assisted exercises to begin facilitating active motion, which therapists can address in later stages of rehabilitation.

Once patients make sufficient progress in the above areas, therapists can progress to other interventions. On the other hand, some patients with more mild effects of stroke may benefit from these same interventions from the very start of their care. Research specifically cites several evidence-based interventions for patients recovering from a stroke:

- Occupation-based interventions for improved ADL function
- Activity-based and occupation-based interventions for increased leisure participation
- Visual scanning training
- Repetitive task training focused on enhancing balance, functional mobility, UE function, and general occupational performance

- Cognitive strategies such as mental practice
- Mirror therapy
- Training on assistive devices to either compensate for motor deficits or adapt tasks
- Sensory re-education
- Activity modifications
- A combination of task-oriented training and cognitive strategies to improve UE function
- Endurance building via cardiorespiratory training
- Strengthening through therapeutic exercises
- Constraint-induced movement therapy (CIMT)
- Neuromuscular electrical stimulation (NMES)
- Aspects of cognitive behavioral therapy (CBT) to assist with self-efficacy and adjustment to disability

In terms of research, there is evidence to support post-stroke occupational therapy intervention as the most effective when it began in the hospital before transfer to a SNF. This along with caregiver involvement from the start of therapy led to an improvement in self-efficacy and fatigue levels of individuals with stroke. A dated, but reliable systematic review also found that OT intervention decreased the likelihood that patients recovering from a stroke experienced poor health outcomes and increased their function in ADL tasks.

Section 5 Personal Reflection

What overarching goals and tasks might therapists be able to offer when overseeing group therapy for patients with various neurological disorders?

Section 6: Therapist Considerations in Skilled Nursing Facilities

References: 60, 61

Just as there are many factors that impact a patient's time in a skilled nursing facility, there are many practice-related considerations for SNF therapists to be aware of. Productivity is one of these main considerations.

Skilled nursing facilities, along with hospitals, are some of the only practice settings that impose productivity standards on their therapists. Productivity standards are implemented by organizations in an effort to increase the efficiency of rehabilitation departments to receive sufficient reimbursement for their services. Most SNFs place these standards between 90 and 95%. Productivity standards can be calculated by dividing the amount of time a therapist is at work by the amount of billable hours a therapist documents. According to this formula, productivity standards do not account for non-billable time such as documentation, chart reviews, or other ancillary tasks. For this reason, documentation can become a source of stress for many therapists. SNFs and similar healthcare organizations encourage therapists to avoid this by completing point-of-service documentation, which entails writing notes during a patient's treatment session. While this may not always alleviate the pressure of productivity standards, studies also show that time management, mentorship, task prioritization, and general organization can help therapists more easily fulfill their job roles.

Research found that productivity standards can negatively impact provider well-being and job satisfaction. If such stringent standards impact the provider in this way, productivity requirements can also indirectly influence the patient-provider relationship and produce poorer outcomes in patients.

Body mechanics are one of the other chief considerations for therapists working in SNFs. Therapists must use proper ergonomics and good body mechanics when lifting patients who need significant help transferring and with functional mobility. This not only prevents therapist injury, but good body mechanics and safe lifting techniques also allow providers to be as effective as possible when helping patients. Whenever possible, therapists should defer to mechanical lifts for patients who are dependent for transfers and mobility. Otherwise, therapists should use the following technique when moving patients:

- The provider should start by placing a gait belt around the person's waist and adjusting it according to their waist size.
- The provider should then place their arms around the patient's back and clasp their hands together.
- While lifting the patient, the therapist should then reach back and partially grasp the gait belt to assist them.
- Once the therapist assumes this posture, they should lift the patient closer to them while learning back slightly and shifting their weight to accommodate the patient's body.
- Providers should use the following body mechanics during a lift:
    - Always lift with the legs, not the back, since this offers more reliable power.
    - Bend at the hips and knees until the point of a deep squat.

- Keep the head up and shoulders straight to allow the back to remain straight.
- During the lift, push your legs into the ground in an attempt to straighten them.

Section 6 Personal Reflection

How do standard lifting techniques differ from patient lifting techniques?

Section 7: Case Study #1

An OT completed an evaluation of a 71-year-old male who underwent bilateral knee replacements 3 weeks ago and just got transferred to a SNF yesterday. There have been no complications thus far and he has no co-occurring conditions that will impact his recovery. He is retired and lives with his wife in a one-level home. There are no steps within his home nor on the outside of his home, so access is not an issue upon discharge. This patient's main activity is maintaining his home and property on a daily basis, as he owns 2 acres of land and still does all of the outdoor upkeep independently. While he does want to return to being independent in basic ADLs, he is mostly concerned about landscaping for his own home.

1. What would be some appropriate occupational therapy goals for this patient?
2. Would a co-treatment help this patient meet his goals? If so, with what discipline and how?
3. What would client-centered, occupation-based intervention look like for this patient?

Section 8: Case Study #1 Review

This section will review the case studies that were previously presented in each section. Responses will guide the clinician through a discussion of potential answers as well as encourage reflection.

1. What should the focus of this patient's occupational therapy goals be?

   Since this patient's primary focus is on doing yard work outdoors, the therapist should be sure his goals both reflect this activity itself as well as the individual client factors needed to engage in this activity. Goals should focus on the completion of yard work itself along with endurance, balance on a variety of outdoor terrains, and standing activity tolerance.

2. Would a co-treatment help this patient meet his goals? If so, with what discipline and how?

   Yes, a co-treatment with physical therapy would be a great way to address this patient's goals. Because this patient's main occupation is such a physically demanding activity, OT should collaborate with PT from the very beginning. Firstly, this ensures each discipline is contributing toward building this patient's range-of-motion, coordination, and balance. Co-treatment with PT will also allow both therapists to grade activities appropriately to gradually prepare the patient for going outdoors to simulate such activities during sessions.

3. What would client-centered, occupation-based intervention look like for this patient?

   Initially, the patient would speak at length with the OT about the specific type of yard work he does along with details about how his property is laid out. This would allow the OT to structure the plan of care accordingly. The

therapist should also have a good idea of how long this patient would work in the yard without taking a break, the type of equipment he works with, and whether or not anyone would help him with these tasks. Early interventions would have a strong focus on building client factors to allow the patient to return to his baseline stamina, strength, and coordination. These interventions would include strengthening exercises along with therapeutic activities that build dynamic balance, standing tolerance, and more. As the patient's standing activity tolerance and other factors improve, functional mobility tasks will be incorporated as the therapist prepares the patient to simulate similar yard-related tasks outdoors.

Section 9: Case Study #2

A 45-year-old woman was admitted to a SNF after she was diagnosed with multiple sclerosis (MS). She began exhibiting significant paresthesias over the course of several weeks, but did not think anything of it until she went to get out of the tub one day and could not do so. This led to her falling and being unable to get up or seek help since she lives alone. As a result of the fall, this patient sustained a fractured forearm and ankle that are both healing typically. Multiple fractures along with motor symptoms associated with MS were significant enough to warrant continued rehab in a SNF.

The patient's doctor recommended she use a front-wheeled walker for ambulation from now on to prevent falls. The patient lives alone and it is not yet safe for her to return to her home since she has 6 exterior stairs that she cannot navigate. She has a nearby family member who can assist with grocery shopping, cleaning, and laundry, so IADLs are not a priority. The patient is quite concerned about her ability to care for herself and she does not want assistance from an aide if she can help it, so basic ADLs are her main focus.

1. What goals should this patient's OT be focused on?
2. Does this patient need a home evaluation?

Section 10: Case Study #2 Review

This section will review the case studies that were previously presented in each section. Responses will guide the clinician through a discussion of potential answers as well as encourage reflection.

1. What goals should this patient's OT be focused on?

   The therapist should ensure this patient's goals are focused on ADLs. The therapist should complete a comprehensive evaluation to determine what specific ADLs are the most difficult for the patient and to identify what deficits the patient has that are making these tasks hard. The therapist should share the results of the evaluation with the patient and ask her which ADLs she would like to prioritize the most. The OT should then center goals around those ADLs and the skills the patient needs to improve in order to successfully complete such tasks.

2. Does this patient need a home evaluation?

   The patient may benefit from a home evaluation to determine if exterior access can be improved with a modular or portable ramp, or if the patient needs a custom ramp. This will depend on how much space is available and what physical barriers the ramp will need to go around. Since the patient has a new diagnosis, there may also be some areas inside the home that prevent her from getting around properly. It would help if the therapist could see those in order to find a solution.

Section 11: Case Study #3

A 69-year-old female was just admitted to a SNF after experiencing a CVA 7 days ago. She currently presents with moderately impaired strength and sensation on the left side of her body. The patient's arm and leg were both impacted. She had little to no cognitive or speech symptoms after the stroke. The patient made great progress during her time in the hospital. She is ambulatory with a front-wheeled walker, yet her gait is unsteady and she relies heavily on the device. She needs continued rehabilitation and also does not have a safe discharge plan, which is why she was sent to the SNF. Prior to the stroke, the patient was entirely independent and lived with her adult child on the top floor of a two-story home that she rents. There is no elevator and the patient must ascend 20 stairs to get to her accommodations. Up until her hospitalization, the patient was driving herself to a part-time job as a museum tour guide. The patient does not rely on this money for living, as she reports having a good nest egg to fall back on. The patient consistently emphasizes how much she loves the work she does and does not want to lose her job.

1. Is it feasible for this patient to return to her job?
2. What type of discharge plan would allow this patient to leave the SNF and reenter the community?
3. What vocational pursuits are within the realm of possibilities for this patient?

Section 12: Case Study #3 Review

This section will review the case studies that were previously presented in each section. Responses will guide the clinician through a discussion of potential answers as well as encourage reflection.

1. Is it feasible for this patient to return to her job?

   It's too early to discuss whether it's possible for this patient to return to her job. While this has been identified as a chief priority for the patient, a discharge plan takes precedence over vocational activities since the patient does not currently have a safe place to return to. The therapist should emphasize the importance of discharge planning to the patient while empathizing and validating the patient's desire to address vocational goals.

2. What type of discharge plan would allow this patient to leave the SNF and reenter the community?

   The patient would be able to discharge from the SNF if she had one of several options: a mechanical stair lift allowing her safe ingress/egress of her existing home; an apartment building with an elevator; a different two-story home with a first-floor setup; or a one-level home. The patient will likely also require a higher level of assistance, so the discharge location should also have enough living space for the patient's adult child.

3. What vocational pursuits are within the realm of possibilities for this patient and how can an OT in the SNF help with them?

   This is dependent on how much progress the patient makes in rehabilitation. It is possible for the patient to continue modified work in her current role if the museum is willing to make accommodations for her. The museum is a state building which must follow ADA guidelines, meaning it has ramps and other infrastructure to accommodate a mobility scooter and/or front-wheeled walker. The OT can take a closer look at the patient's job duties and determine if the patient can continue with those based on her new functional level. If employment is not a possibility, the patient may be able to continue modified vocational work at the museum by

volunteering. If the patient wants to continue driving herself to work (and elsewhere), the OT can provide driver rehabilitation services, offer interventions that address driving, or refer her to a driver rehabilitation program nearby. If those are not an option or the patient decides she does not want to resume driving, she can be educated on the use of public transportation or can arrange transportation with her child who has his own car.

Section 13: Case Study #4

A 55-year-old male with chronic obstructive pulmonary disorder was admitted to a SNF after an exacerbation of his condition. He was also recently diagnosed with diabetes, but this condition is not being well managed as the patient does not take his medications nor does he monitor his blood glucose levels and diet. As a result of his COPD worsening, doctors have now prescribed him 2L of oxygen delivered through a nasal cannula and portable oxygen tank on a regular basis. The patient has recently been more accepting of this intervention but is concerned about how he will navigate his home (especially the bathroom) with his oxygen. He also tells the OT that he was never given details about his diabetes and does not know how to go about managing that condition.

1. What occupational area appears to be the main concern for this patient?
2. What types of interventions can help the therapist address the aforementioned concerns?

Section 14: Case Study #4 Review

This section will review the case studies that were previously presented in each section. Responses will guide the clinician through a discussion of potential answers as well as encourage reflection.

1. What occupational area appears to be the main concern for this patient?

   The patient's concerns appear to be surrounding functional mobility, fall prevention, and disease management.

2. What types of interventions can help the therapist address the aforementioned concerns?

   The therapist should focus interventions on educating the patient about each of his conditions (COPD and diabetes) in a way that is comprehensible and emphasizes the actions he should take to prevent further discomfort and complications. The therapist should provide some written content (in accordance with the patient's literacy level) that has the same information for them to refer to in the future. The therapist can also help the patient write down contact information for each of his specialists who he can contact in the event of an emergency or further questions. In addition, a calendar along with other orientation aids (notes, phone reminders, etc.) can help the patient remember to incorporate certain lifestyle changes (like drinking enough water and remaining active) to manage his conditions. The therapist can offer education on diet and exercise to assist with stabilizing blood glucose levels. In terms of COPD management, the therapist can train the patient how to walk using good body mechanics and ergonomics along with their oxygen unit. The patient would also benefit from a strengthening program to assist with building and maintaining the patient's endurance along with energy conservation strategies to break up household

responsibilities. The therapist may even want to do a home visit to ensure there is sufficient walking space within the home for the oxygen tank (depending on how large the model the patient ends up with is). Based on the home environment, the therapist may also offer education on fall prevention if there are areas of concern.

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