

# POSTette: Considerations for Clinically Complex Patients

**Reference:** Medicare Benefit Manual Chapters 8 & 15; APTA; AOTA; ASHA

A clinically complex patient is described as having co-morbidities of several medical conditions often with a cardiopulmonary overlay that significantly compromises their ability to function.

Most of these patients have primary diagnoses that require nursing intervention and often have the presence of exacerbation and/or remission. In addition, there are often other challenges: low activity tolerance, lack of participation, and low motivation. The most common conditions of medically compromised patients include respiratory, cardiovascular, metabolic, and infection.

**Note:** patients who are clinically unstable (uncontrolled hyper/hypotension; arrhythmia; angina; etc.) will need to have their conditions stabilized prior to restorative intervention. Treatment to participate in assessment, develop safe handling/activity plans, and train caregivers as approved by the physician is appropriate.

#### Respiratory Conditions

- Pneumonia
- COPD /Chronic Bronchitis
- Emphysema
- Asthma
- Atelectasis

#### Cardiovascular Conditions

- CHF
- Hypertension

#### Metabolic Conditions

- Renal failure
- Diabetes

#### Infection Conditions

- Sepsis
- Systemic Inflammatory Response Syndrome (SIRS)

#### Evaluation Considerations

Assess and Document:

- Respiratory Function
- Cardiovascular Function
- Endurance
- Polypharmacy
- Ability to tolerate functional activity

Assess all respiratory characteristics including dyspnea or nasal flaring with inspiration (a sign of respiratory distress). Look for distention of the neck veins, which could be an indication of elevated central venous pressure. Evaluating breathing patterns is important diagnostic data. Initially assess breathing when the patient is at rest in order to establish a baseline and to reduce anxiety.

Look for symmetry of the chest and abdominal movement while the patient is supine, seated, and if able, standing. Make note of any observable abnormal breathing patterns.

Increase the patient's respiratory function by engaging them in conversation and initiating vocal drills (long and short phonations, singing, etc.) Note any changes in respiratory function (using dyspnea scales) or O<sub>2</sub> saturations (using a pulse oximeter) as activities increase.

Assess for postural compensations. I.e. the patient has a habit of using their upper extremities for thorax stabilization; or they utilize compensatory resting positions such as leaning in while sitting or resting against a wall to decrease the work of breathing.

Use Dyspnea Scales to record the patient's respiratory function with and without activity. The three common scales used to measure a patient's level of shortness of breath are: the Rancho Los Amigos Dyspnea Scale; the Perceived Exertion Scale (modified Borg scale); and the Ventilatory Response Index (VRI).

Assess vitals and labs. Measure vitals at rest and with activity (Compare to norms for that age group):

- Heart Rate
- Respiration Rate
- Blood Pressure
- O<sub>2</sub> SATs
- Pain
- Mental Status
- Review Labs / Pharmacology

When reviewing lab work remember:

- Normal lab values in the elderly are compromised by the high prevalence of disease and by age related physiologic and anatomic changes
- Drugs may alter the results of lab tests
- Utilize appropriate references to determine normal values for each patient

Document current level of function during activity:

- Percentage of trials
- Cueing levels
- Outcomes from formal assessments (6-min walk test; 30 sec chair stand; arm curl; 2 minutes step in place; RPE; Seated Step Test; Senior Fitness Test; Functional Reach; Incentive Spirometry, etc.)
- Include measurements of the patient's physiological response to the activity, such as oxygen saturation levels, pulse, respiration and perceived exertion.

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## Establishing Goals

Determine how all of the information collected can be captured in functional goals. Goals need to be measurable, functional, and sustainable. Goals for this population need to address:

- Improving the patient's ability to perform activities of daily living
- Decreasing symptoms identified in evaluation that impact function.
- Increasing endurance and strength
- Improving the patient's quality of life
- Decreasing negative consequences of deconditioning
- Returning patient to prior level of function (or beyond)
- Include the patient and family to determine functional goals for discharge
- Implement small incremental goals that will be updated frequently for this population. (Modification of the goals and treatment plan are skilled services).

## PT Goals Examples

- In two weeks patient will have a decreased RPE (10-11) with household ambulation distances at a level to allow mobility within the room.
- In four weeks patient's six-minute walk test will improve to \_\_\_\_\_ score to allow activity tolerance for chosen activities for up to 4 hours/day.
- In four weeks patient's aerobic conditioning will improve to allow functional mobility within the facility for up to 6 hours/day.
- In two weeks patient will follow breathing strategies 80% of the time to improve activity tolerance to allow transfers and ambulation within the room.

## OT Goals Examples

- In 2 weeks, patient will utilize necessary adaptive equipment to safely complete upper body dressing tasks increasing to minimal assistance while maintaining oxygen saturation levels > 90% with minimal verbal cues for breathing techniques.
- In 2 weeks, patient will actively participate for 30 minutes of graded therapeutic activity, due to improvement in weakness, influenced by SOB, in order to increase independence in self-care tasks.
- In 4 weeks, patient will tolerate upright standing, maintaining proper postural alignment and weight distribution for 15 minutes, maintaining > 90% oxygen saturation levels, to increase upper body trunk strength, standing tolerance, and to increase interaction with his/her environment.
- Upon discharge, patient will independently perform breathing technique to maintain oxygen saturation

levels above 90% and to minimize SOB for improved carryover during ADL and functional mobility.

## SLP Goals Examples

- In four weeks patient will increase respiratory support for communication by sustained phonation for 12-15 seconds
- In two weeks patient will increase respiratory support for communication and meal consumption as demonstrated by incentive spirometry reading of 1200 cc/second.
- In four weeks patient will demonstrate increased activity tolerance as demonstrated by ability to have a 15 minute phone conversation with O2 saturation > 90%

## Skilled Intervention Considerations

- Depending on the diagnostic results of each patient, treatment approaches will vary and need to tie back to the established goals.
- Provide treatment during normal daily routines to help conserve energy, especially at the beginning of intervention.
- Monitor vitals before, during and after activity (know the contra-indications for exercise with this population)
- Reduce patient anxiety by providing treatment in their room or less active areas.
- Keep therapy sessions short or split the treatments as vital signs and patient ability dictate.
- Make treatment modifications as the patient's clinical tolerance dictates. Document the modifications and fluctuations in treatment approaches.
- Integrating rest and assessment into treatment is critical for medically complex patients and is part of the provided treatment session.
- Assessment of a patient's condition, changes in recovery time, functional activity tolerance and mentation, assessment of vitals, and addressing levels of pain are all skilled interventions and essential to patients' recovery.

## Skilled Interventions:

- Postural management for pain relief and/or respiratory ease
- Positioning for adequate respiration at rest and with activity
- Breathing techniques at rest and with functional activity (resistive breathing; diaphragmatic and pursed-lip breathing)
- Train coordination of breathing while speaking and other activities

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- Training and education in energy conservation for activity and ADLs (task segmentation, pacing, work simplification)
- Provide support surfaces for pressure relief in bed and wheel chairs
- Train clinically appropriate transfers
- Ensure adequate hydration
- Train airway protection strategies
- Train safe coughing techniques
- ROM exercises for improved strength, flexibility and coordination & peak work capacity
- Head and neck exercises
- Aerobic conditioning training
- Balance and gait training
- Integration of Modalities
- Psychosocial adaptations
- Community reintegration
- Home environment assessments
- Patient education
- Repeat diagnostics to compare patient function (6 min walk test; RPE; Dyspnea Scales; etc.)

It is important for Rehab Services to be involved with the clinical team for each admission. Some interventions may be brief (training/education) and others may involve direct 1:1 skilled intervention. A comprehensive clinical approach will ensure success for each patient.

### Progress Reports

A progress report shows how the patient is responding to intervention; their progress towards the goals; and justifies continuation of skilled intervention for the patient.

Continuation of services with no or minimal progress in a progress report period must be supported in the documentation. The justification statement also addresses how progress on the treatment goals has helped to move the patient closer toward meeting those goals. Justification statements for continuation of therapy services need to be written at least weekly.

### Justification Statement Examples

- Patient presents with several co-morbidities that impact the length and duration of therapy. Patient requires the skills of a therapist to reach the goals set to maximize independence for \_\_\_\_\_.
- Progress is limited by underlying conditions of \_\_\_\_\_ and \_\_\_\_\_ requiring modification of the treatment and training of tasks on a daily basis for patient to return to \_\_\_\_\_ level of independence.

**Remember:** Describing how the medical history impacts current functional status helps determine the circumstances that led to the need for skilled intervention.

The need for skilled intervention must make sense; support medical necessity and tie back to the goals. It is important to ask what could happen if skilled rehabilitation services were not initiated, such as safety risks and possible further decline.

Treatment plans for this population are highly changeable and will typically look very different from week to week. Documentation that relies purely on build documentation and status updates of traditional mobility or self-care goals will seldom capture change or reflect the complexity of the services provided. Be prepared to revise some goals on a weekly basis, be prepared to describe the material impact the therapy had outside of goal areas (participating in assessments for medical management, establishing safe activity regimens, training caregivers, problem solving with the clinical team).

The skills and techniques that can be taught to this population will not only improve the quality of their functional abilities but also improve their quality of life.

### Additional Resources:

Vital Signs in Older Patients: Age Related Changes  
<http://www.ncbi.nlm.nih.gov/pmc/articles/PMC3102151/>

Cardiovascular and Respiratory Rehab Quick Reference Card

Respiratory Rehabilitation Program Check list

Cardiovascular Rehabilitation Program Check list

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APTA.org  
ASHA.org  
AOTA.org