

What can Occupational Therapy offer in Critical Care?

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Why is OT needed in Critical care?

- ▶ Currently not meeting national standards/guidelines.
- ▶ Early Intervention can prevent severity of impairments/deconditioning
- ▶ OT input can improve function at discharge.
- ▶ Shortens episodes of delirium and reduces risk.
- ▶ Can reduce ICU and hospital length of stay.
- ▶ OT's are dual trained in physical and mental health.

NICE/GPICS OT Guidelines:

- ▶ The critical care rehabilitation team should include a senior Occupational Therapist to contribute to and develop rehabilitation programmes.
- ▶ An assessment of the rehabilitation needs of all patients should take place within 24 hours of admission.
- ▶ All patients to be screened for delirium.
- ▶ All appropriate patients to be offered a minimum of 45 minutes of each therapy a day, 5 days a week.
- ▶ All patients must have outcome measures.
- ▶ All patients must have individualised SMART goals set.

Impairments that commonly occur in Critical Care patients:

- ▶ Immobility and prolonged bed rest
- ▶ Deconditioning/global weakness
- ▶ Sensory deprivation, stress/anxiety
- ▶ Prolonged mechanical ventilation
- ▶ Contractures
- ▶ Delirium, disorientation and cognitive problems (memory, attention, executive function)
- ▶ Low mood
- ▶ Post Intensive Care Syndrome.....

Post Intensive Care Syndrome

Physical

Muscle weakness

Fatigue

Weight loss

Joint pain/Stiffness

Impaired mobility

Psychological

Anxiety

Depression

PTSD

Cognitive

Amnesia

Confusion

Delirium

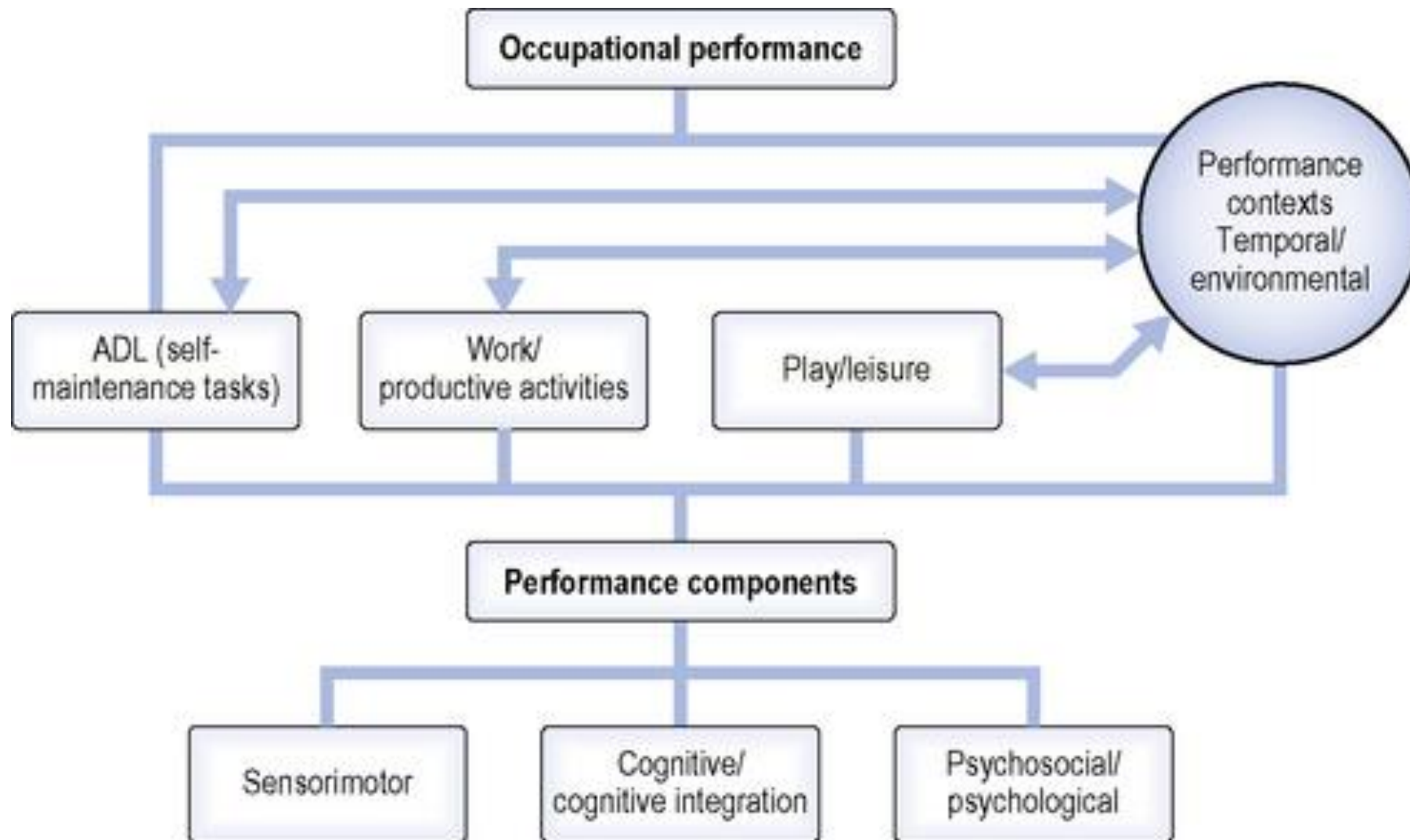
Cognitive impairment

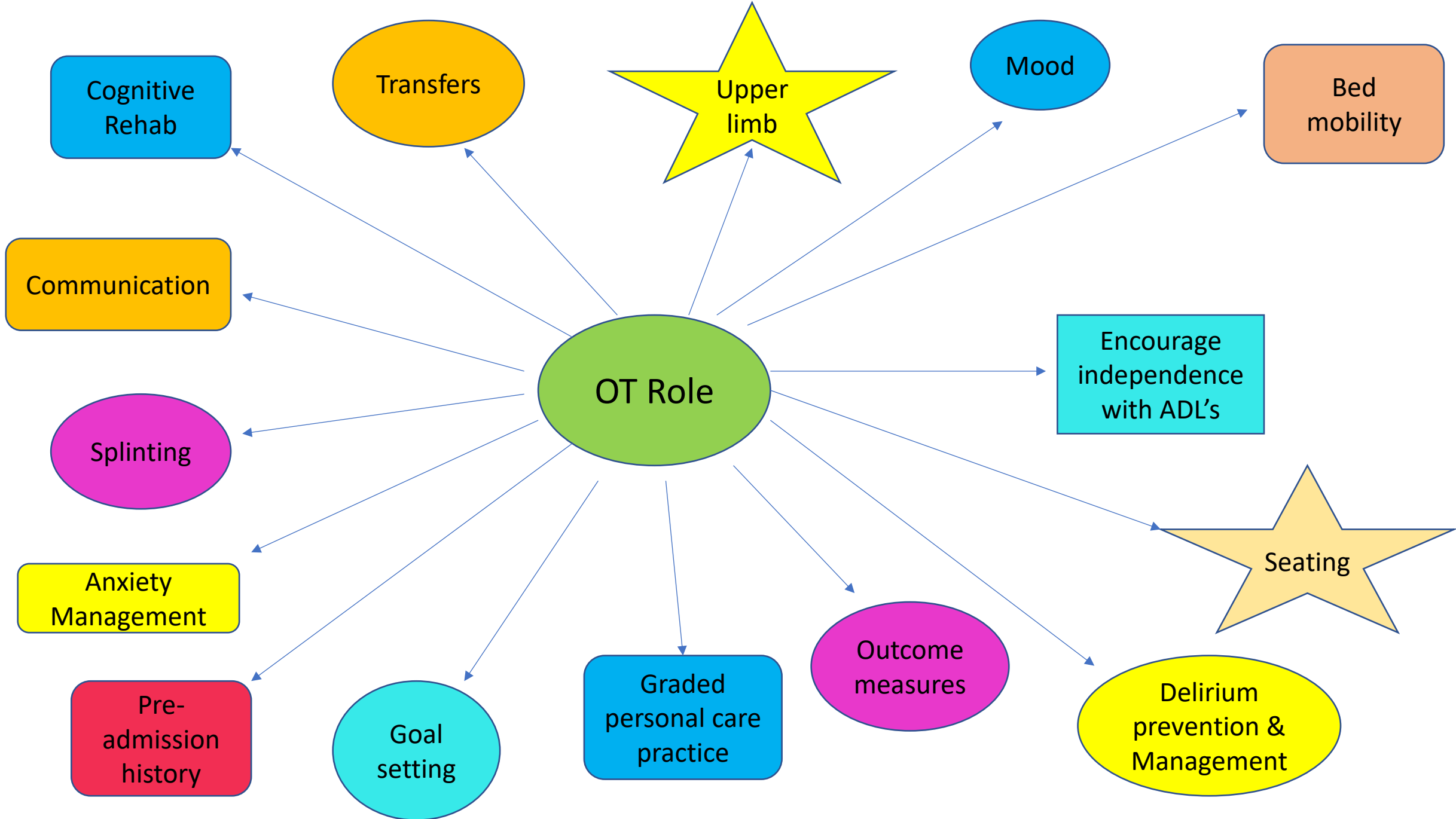
Social

Reduced social participation

Isolation from family and friends

Health & Well-being of others





Key OT areas

Cognition

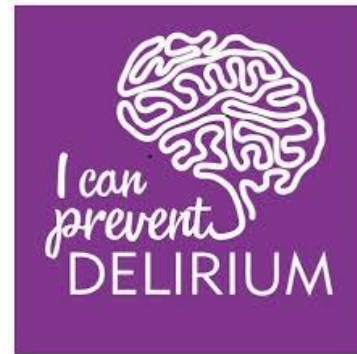
- ▶ Alertness
- ▶ Attention
- ▶ Orientation
- ▶ Visual and Spatial Perception
- ▶ Object Recognition
- ▶ Memory
- ▶ Executive skills

Assessments

- Cog-Log
- O-Log
- MOCA
- BNVR

Delirium Prevention & Management

- Assess cognitive changes
- CAM-ICU
- Daily orientation
- Cognitive stimulation
- Sleep hygiene
- Familiar routine
- Familiar objects/photos
- Family involvement
- ICU Dairies



Intervention	Description	Completed?
Orientation	Daily orientation questions, provide with orientation board, clock, calendar, family visits, photos, familiar objects from home.	
OT and Physio input	Daily therapy input. Encourage independence in activities of daily living. Reduce risk of falls.	
Early Mobilisation	Minimise restraints, encourage mobilisation/bed exercises, provide with exercise booklet.	
Therapeutic activities/Cognitive stimulation	Provide with meaningful activities - crosswords, puzzles, TV, reminiscence, discuss the news etc. Remote activities 3 times daily.	
Sleep enhancement	Provide with earplugs, eye-masks, relaxation techniques. Ensure sunlight visible during day, and lights off at night. Avoid night time interruptions.	
Sensory adaptations	Provide glasses, hearing aids, communication aids, sensory massage	
Environment/noise	Noise reduction, provide with earphones, earplugs, avoid moving rooms, provide with soothing music, pleasant scents,	
Optimise nutrition, hydration and continence	Monitor oral intake and fluids. Assist with feeding if required. Ensure dentures are in place if appropriate.	
Minimise social isolation	Facilitate regular visiting/communication with family. Family involvement where possible.	
Psychoactive medications	Daily sedation hold/medication review.	
Education	Educate MDT and family about delirium. Reassure patient it is temporary and reversible. Explain what delirium is and why it happens.	
Monitor pain	Monitor pain and ensure pain is controlled.	

Communication

- ▶ Communication aids:
 - ▶ IPAD
 - ▶ Communication Tool
 - ▶ Pen & Paper
- ▶ BNVR
- ▶ Facilitate video-calls to family
- ▶ ICU Diaries

Upper Limb Management

- ▶ Positioning to prevent contractures
- ▶ Oedema prevention and management.
- ▶ Splinting/Spasticity
- ▶ Strengthening exercises
- ▶ Co-ordination
- ▶ Engage in functional tasks (Personal care, Feeding)

Personal Care

- ▶ Encourage to engage in washing and dressing
- ▶ Grooming
- ▶ Improve mood/confidence
- ▶ Promote independence
- ▶ Graded approach
- ▶ Can identify other problems (cognitive, perceptual, physical)
- ▶ Promote daily routine

Case Study

Mrs A

- ▶ Admitted with pneumonia and type 1 respiratory failure. Recent ORIF of Left humerus.
- ▶ OT assessment commenced after a sedation hold.
- ▶ Completed the essential parts of the initial interview.
- ▶ Upper limb Ax: ROM, strength and tone in upper and lower limbs and ensured correct positioning in bed.
- ▶ Standardised cognitive assessment (The Butt Non-Verbal Reasoning Test) completed
- ▶ Daily upper limb therapy was completed daily due to reduced activity in her left upper limb, as a result of the ORIF.
- ▶ Graded personal care practice/encouraged daily routine.

- ▶ Collaborative working with physiotherapy: sitting balance, transfers, seating.
- ▶ Collaborative working with rehab nurses to facilitate taking the patient outside, as this was also one of her goals.
- ▶ Communication with family/facilitated regular video calls.
- ▶ Early discharge planning.
- ▶ Joint home visit was completed with the critical care OT and D2A OT.
- ▶ The patient is now fully independent with ADL's and back at work!

In summary:

Occupational Therapy is holistic, focusing on promotion, restoration, and maintenance of ADL's. OT's are skilled in all domains of health and functioning:

- ▶ Physical
- ▶ Cognitive
- ▶ Psychological
- ▶ Environmental

- ▶ Building therapeutic relationships
- ▶ Understanding/modifying the environment
- ▶ Key role with family members

Research indicates Occupational Therapy is a safe and valuable part of Critical Care Rehabilitation. Early rehabilitation improves a variety of factors:

- ▶ Improve functional independence.
- ▶ Reduce complications associated with PICS.
- ▶ Shorten the time patients spend on ventilators and time spent in ICU.
- ▶ Improving patient access to rehabilitation can result in length of stay decreases of 2.1 to 3.1 days.
- ▶ Patients who have gone through rehabilitation rate their quality of life better in terms of health.
- ▶ Studies show that the earlier rehabilitation begins, the better the outcomes for patients who are coming out of ICU.

Current situation:

- ▶ No OT cover for Critical Care.
- ▶ Pilot stopped due to lack of staffing in acute team.
- ▶ Business case rejected but being reviewed again.

Any Questions?