

Mild to Moderate TBI Occupational Therapy Standards of Practice

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1 PURPOSE

To ensure New Zealand Registered Occupational Therapists (NZROT) at Auckland DHB follow minimum best practice standards in their practice with patients with mild-moderate Traumatic Brain Injury (mTBI).

2 DEFINITIONS

- mTBI Mild-moderate Traumatic Brain Injury
- NZROT New Zealand Registered Occupational Therapist

3 GUIDELINE MANAGEMENT PRINCIPLES & GOALS

This guideline is based on existing TBI-related evidence-based reviews and guidelines. It defines the minimum standards upon which occupational therapists must base their practice with patients presenting with mild to moderate TBI from Referral to the NZROT through to Discharge from occupational therapy services. The guidelines set out the minimum standards only for ADHB NZROT's. Occupational therapists should strive to maintain the highest possible level of skill and knowledge in the assessment and management of mild to moderate TBI in the acute setting.

4 STANDARDS FOR OCCUPATIONAL THERAPISTS

I. Referral	<p><i>The occupational therapist shall:</i></p> <ol style="list-style-type: none"> 1. Acknowledge referral and document reason of referral in the clinical notes 2. Determine appropriateness of referral 3. Decide to accept or decline the referral based on the results of the occupational therapy screening process 4. Advise the referrer of the outcome.
II. Screening	<p><i>The occupational therapist shall:</i></p> <ol style="list-style-type: none"> 1. Obtain informed consent from the patient/family/whanau 2. Record patient's consent with the assessment or lack of consent 3. Review previous OT input and other information relevant to the admission 4. Gather background information pertinent to pre-morbid history including history of previous concussion/ TBI, cognition/memory functions, headache, developmental, psychiatric, seizure, substance and alcohol abuse, medication history, situational/psychosocial factors. ^{1,2} 5. Gather information pertinent to current medical history including CT scan result, if available, history of loss of consciousness, Glasgow Coma Score, intoxication of the time of accident and medication administered. ^{1,2} 6. Document the screening results or if previously stated in the clinical notes, refer to the source of information with associated date 7. Communicate and record the screening results and recommendations whether to continue or discontinue occupational therapy services
III. Assessment	<p><i>The occupational therapist shall:</i></p> <ol style="list-style-type: none"> 1. Explain the OT role in assessment and management of mild - moderate TBI in language that the patient can understand 2. Gather background information pertinent to patient's social/occupational profile including living situation, life role e.g. employed, student, mother etc., sports activities, and occupation. ^{1,2} Document information provided in the clinical notes 3. Utilize appropriate assessment methods considering the service request, the screening results, and other factors known including age, past medical history, current trauma history, medication used, and relevant occupational performance components 4. Use clinical reasoning and recommended criteria in selecting the most appropriate types of assessment, including Rivermead Post-concussion symptoms questionnaire (RPQS) ^{6, 15, 22} and Abbreviated-Westmead Post Traumatic Scale (A-WPTAS), ^{5, 8, 16, 20, 21, 22, 24} or Westmead Post Traumatic Scale (WPTAS) ^{9, 16, 17, 20, 23, 24,, 25} 5. Administer selected standardized assessment tools according to established protocols ²⁵ 6. Carry out occupational performance assessment in areas of self-cares, productivity and leisure as appropriate. Liaise with members of multidisciplinary team (MDT) on current occupational status in the ward 7. Identify the performance components and occupational performance observed/reported during assessment 8. Document the assessment results including assessment tools used

<p>IV. Intervention Plan and Goal Setting</p>	<p><i>The occupational therapist shall:</i></p> <ol style="list-style-type: none"> 1. Ensure the action plan is consistent with the assessment results, recommendations, and referral request. 2. Review RPQS^{6, 15, 22} to evaluate change and severity of concussion symptoms 3. Continue Westmead PTA Scale^{5, 8, 9, 16, 17, 20, 23, 24, 25} until deemed out of PTA or discontinue when appropriate. State rationale for discontinuation of the PTA scale in the clinical notes 4. Review occupational performance as needed. Re-evaluations are conducted at a frequency that enables regular monitoring of progress 5. Set goals as appropriate involving patient or family/whanau 6. Facilitate the transition or discharge process in collaboration with the patient, family members, significant others, other professionals (e.g. Trauma team, nurses, physiotherapist, social worker) as appropriate
<p>V. Intervention</p>	<p><i>The occupational therapist shall:</i></p> <ol style="list-style-type: none"> 1. Develop, document, and implement occupational therapy intervention based on the assessment, patient goals, best available evidence, and clinical reasoning including but not limited to: <ol style="list-style-type: none"> i. Education on concussion symptoms and strategies to minimize the impact of symptoms and gradually resume activity and participation in life roles^{6, 29, 33, 34} ii. Education on potential delayed concussion symptoms and advice to contact GP if any concerns arise, iii. Provision of verbal and written educational information^{26, 27, 29, 30} such as ACC “Knowing about your Mild Traumatic Brain Injury” pamphlet’ and reassurance that the symptoms are likely to resolve over a period of weeks or few months^{10, 27} 2. Modify the intervention plan throughout the intervention process and monitor changes in patient’s occupational performance components

VI. Evaluation of Outcomes	<p><i>The occupational therapist shall:</i></p> <ol style="list-style-type: none"> 1. Identify specific concussion symptoms as reported by patient or ward staff and observed during assessment 2. Identify potential confounding factors such as pain medication^{19, 21, 31, 36} (morphine, tramadol, anaesthetic effect) and pre-morbid history that may influence symptom reporting and assessment results 3. Establish severity of reported (based on RPQS^{6, 15, 22})/ observed concussion symptoms and determine if further assessment is required 4. Determine impact of concussion symptoms into occupational performance and potential participation issues in areas of self-cares, productivity and leisure/routine 5. Document changes in the patient's occupational performance and participation 6. Determine presence of acute cognitive deficits or post traumatic amnesia (PTA) and be aware of potential confounds when assessing PTA^{18, 19}. Considerable caution should be applied 7. Identify any indication of anxiety⁷, mood changes or evidence of post-traumatic stress^{32, 33, 35, 36} 8. Identify risk of developing Post-Concussion Syndrome (PCS) and determine need for referral to services e.g. concussion clinic 9. If Westmead PTA testing is not suitable due to long standing cognitive impairments or older adult with pre-existing impaired function (use clinical reasoning), consider or recommend formal cognitive screen (e.g. MOCA) be completed^{5, 8, 9, 16, 17, 20, 23, 24, 25}. Clinical reasoning as to why cognitive screen is selected should be clearly documented. 10. Interpret the results of the test with caution and considerations for those patients who experience concussion symptoms and receiving high dose of pain medication e.g. morphine, tramadol, codeine as these can influence cognitive functioning
VII. Discharge from Occupational Therapy Services	<p><i>The occupational therapist shall:</i></p> <ol style="list-style-type: none"> 1. End the occupational therapy process when appropriate. Document the rationale for termination. 2. Discontinue OT services where no active concussion symptoms or acute cognitive deficits and actual or potential occupational performance issues/impairment identified and/or the patient do not desire to continue with services. 3. Recommend or refer to ACC Concussion clinic^{27,28,30} if mild symptoms reported and have minimal impact on occupational performance 4. Consider referral to TBI rehabilitation service if reported symptoms impacting occupational performance, WPTAS less than 12/2 and acute cognitive deficits remain evident 5. End the occupational therapy process when appropriate. Document the rationale for termination

5 LEGISLATION

- Occupational Therapy Board of New Zealand Competencies for Registration and Continuing Practice (2015)
- Occupational Therapy Board of New Zealand Code of Ethics

6 ASSOCIATED AUCKLAND DHB DOCUMENTS

- Occupational Therapy Screening and Management Flowchart of patients with mild – moderate TBI
- Mild to Moderate Traumatic Brain Injury Occupational Therapy Clinical Audit Tool

7 DISCLAIMER

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8 SUPPORTING EVIDENCE

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