

OCCUPATIONAL THERAPY FOR PROFOUND BRAIN INJURY RESULTING IN PROLONGED DISORDERS OF CONSCIOUSNESS (PDOC)

This guidance does not override the individual responsibility of health professionals to make appropriate decisions according to the circumstances of the individual patient in consultation with the patient and /or carer. Health care professionals must be prepared to justify any deviation from this guidance.

Introduction

Prolonged disorders of consciousness (PDOC)

“a state of diminished or absent responsiveness/awareness persisting for more than 4 weeks following sudden onset profound acquired brain injury”

Disorders of consciousness(DOC)include:

- Coma (Absent wakefulness and absent awareness)
- Vegetative state (Wakefulness with absent awareness)
- Minimally conscious state (Wakefulness with minimal awareness)

These definitions are taken from the Prolonged disorders of consciousness National Clinical Guidelines-Report of a working party 2020 by Royal college of Physicians.

This guideline is for use by the following staff groups :

All occupational therapy staff working with patients who have suspected PDOC.

Lead Clinician(s)

Beverley Phillips	Clinical lead Trauma, Orthopaedics & surgery
Laura Biles	Clinical specialist Occupational Therapist-neurology
Rebecca Harrison	Clinical specialist Occupational Therapist –neurology
Marie Mooney	Clinical specialist Occupational Therapist –neurology/complex care

Approved by Occupational Therapy Clinical Governance Meeting on:

7th January 2025

Review Date:

7th January 2028

This is the most up to date version and should be used until a revised document is in place

Occupational Therapy for Profound Brain Injury Resulting in Prolonged Disorders of Consciousness (PDOC)		
WAHT-OCT-024	Page 1 of 16	Version 3

Key amendments to this guideline

Date	Amendment	Approved by:
19 th April 2018	Document Approved	OT Clinical Governance Meeting
6 th May 2020	Document extended for 6 months during COVID period	
27 th November 2020	Document extended for 6 months as per email from Beverley Phillips	Beverley Phillips
April 2021	Document extended for 3 months whilst under review	Charlotte Jack
September 2021	Amended job titles, updated references and added summary report form	OT clinical governance meeting, OT manager, specialist consultants.
June 2024	Document extended for 6 months whilst document under review	Beverley Phillips
Dec 2024	Documented amended to reflect changes in RCP guidelines.	Beverley Phillips

OCCUPATIONAL THERAPY FOR PROFOUND BRAIN INJURY RESULTING IN PROLONGED DISORDERS OF CONSCIOUSNESS

Introduction

The purpose of the guideline is to ensure that individuals with suspected PDOC in the acute/post acute phase of recovery within Worcestershire Acute Trust are able to receive co-ordinated, timely and appropriate occupational therapy care in accordance with evidence based practice. These guidelines provide a framework to inform and guide best practice. This document excludes patients who are in a medically induced coma.

Details of the Occupational Therapy Guideline

Referral received from Trauma/Neurosurgical hospital via a rehabilitation prescription, verbal handover to the occupational therapist or complex care generic email



Action referral within two working days of receiving the referral. The referral is allocated to a specialist OT who is skilled with specific experience of patients in PDOC.

Document in patient notes Occupational therapist will commence the PDOC pathway acting in patient's best interests. Patient to have a named OT's to allow continuity of care.



Optimise conditions for behavioural response, assess most appropriate positioning for patient in the bed/chair/wheelchair and develop a 24 hour positioning programme with the MDT.

(refer to RCP – Prolonged disorders of consciousness National Guidelines 2020, section 2 assessment, diagnosing and monitoring and table 2 conditions for assessment of the level of consciousness)



Provide intervention to manage tone and alignment and to prevent the development of contractures



Occupational Therapy for Profound Brain Injury Resulting in Prolonged Disorders of Consciousness (PDOC)		
WAHT-OCT-024	Page 3 of 16	Version 3

Multidisciplinary goal orientated programme of care to be discussed and timetable to be planned. Educate MDT about Occupational Therapy intervention and management of patients PDOC needs eg fatigue, over stimulation



Clinical Assessment of behavioural responses and administration of structured assessment tools.

Wessex Head Injury Matrix (WHIM) and Coma Recovery Scale Revised (CRS-R) to be applied on at least 6 occasions over a 2-3 week period, when the patient is clinically well and free from current infection. Administer at different times of day and different positions where possible



Within 5 working days from the initial assessment the Occupational Therapist will meet with family to establish the patient's baseline, discuss and issue 'information for my therapy professional', (Appendix 1) brain injury leaflet, therapy goals and intervention. Occupational Therapist to continue to meet with the family on a weekly basis as appropriate. Encourage family to complete about me to Trust booklet



Consider onward referral to specialist Neuro rehab centre. Discuss with MDT.



From 3 weeks post admission to Worcester Royal Hospital/Alexandra hospital the Occupational therapist will provide ongoing intervention This could include seating, positioning, upper limb management and low level awareness assessment. Continue to liaise with family.



At 4 weeks Occupational therapist to provide a full formal summary of the outcome of the assessments. (Appendix 2). Including the state of consciousness the patient appears to be in according to their assessments. The suggested summary sheet can be attached to the specialist centres referral form as required and saved in the patients' medical notes.



Patient is then transferred to a specialist Neuro Rehabilitation unit and Occupational Therapist to liaise with the unit to handover the patient

Occupational Therapy for Profound Brain Injury Resulting in Prolonged Disorders of Consciousness (PDOC)		
WAHT-OCT-024	Page 4 of 16	Version 3

APPENDIX 1



WAHT-PI-0683 brain
injury information car

WAHT-PI-0683 Brain injury information

Occupational Therapy for Profound Brain Injury Resulting in Prolonged Disorders of Consciousness (PDOC)		
WAHT-OCT-024	Page 5 of 16	Version 3

APPENDIX 2-ELECTRONIC REPORT

Worcestershire Acute NHS Trust

Occupational Therapy Report

Prolonged Disorders of Consciousness (PDOC) Assessment Progress Report.

NAME:

NHS No. : HOSP No.: DOB: M ☐ F ☐

Consultant: Ward:

Admission date: Diagnosis:

Date of referral to Occupational Therapy:

Reason for referral:

Date of commencing PDOC Pathway:

Report sent To:

Assessments used:

Assessments completed as per Royal College of Physicians (RCP) Prolonged Disorders of consciousness National clinical guidelines (2020) over the recommended 4 week period:

The Wessex Head Injury Matrix (WHIM): is a 62- item hierarchical scale, which provides a sequential framework of tightly defined categories of observation covering an individual's level of responsiveness and interaction with their environment. Behaviours may occur either spontaneously or in response to stimulation).

Number of WHIM assessments completed:

JFK Coma Recovery Scale (CRS-R): has 25 hierarchically arranged items with 6 subscales auditory, visual, moto, oromotor, communication and arousal. Scoring is based on the presence or absence of specific behavioural response to stimuli presented in a standardised manner, from reflexive response to cognitively facilitated responses.

Number of CRS-R assessments completed:

Occupational Therapy for Profound Brain Injury Resulting in Prolonged Disorders of Consciousness (PDOC)		
WAHT-OCT-024	Page 6 of 16	Version 3

Summary of Assessments:

A summary of PDOC assessments is as follows:

On the WHIM the most advanced behaviour seen was.....the total number of behaviours seen are.....

Comments:

On the CRS the range of scores are as follows:

Auditory Function Scale:	/4
Visual Function scale:	/5
Motor Function Scale:	/6
Oromotor/verbal function scale:	/3
Communication scale:	/2
Arousal Scale:	/3
Total	/23

Comments:

Observed behaviours**Recommendations:**

'Following severe brain injury, patients who remain in a state of wakeful non-responsiveness for more than 4 weeks should be referred to or transferred to a unit specialising in the multidisciplinary assessment/ management of prolonged disorders of consciousness (PDOC)' (Royal College of Physicians, 2020).

Therefore in view of above PDOC assessment period and RCP guidelines recommendations are as follows:

- Aim specialised inpatient Neuro rehab centre
- Ensure referral to appropriate rehabilitation setting.
- Ongoing assessment whilst in an acute setting using WHIM/CRS for regular assessment and monitoring,
- Joint assessment and management with physiotherapy for spasticity, tonal changes and positioning, splinting

- Ongoing joint occupational therapy and physiotherapy to establish appropriate transfer methods and seating
- Inform Neuro rehabilitation Consultant of this summary.

Signed.....Designation.....

Date.....

Occupational Therapy for Profound Brain Injury Resulting in Prolonged Disorders of Consciousness (PDOC)		
WAHT-OCT-024	Page 8 of 16	Version 3

Monitoring Tool

This should include realistic goals, timeframes and measurable outcomes.

How will monitoring be carried out? Notes audit

Who will monitor compliance with the guideline? Clinical Specialist/clinical lead occupational therapists (neuro/trauma and orthopaedics)

Page/ Section of Key Document	Key control:	Checks to be carried out to confirm compliance with the policy:	How often the check will be carried out:	Responsible for carrying out the check:	Results of check reported to: <i>(Responsible for also ensuring actions are developed to address any areas of non-compliance)</i>	Frequency of reporting:
	WHAT?	HOW?	WHEN?	WHO?	WHERE?	WHEN?
Page3	Referral actioned within 2 working days of receiving referrals.	Notes audit	Twice a year	Clinical specialists/clinical lead occupational therapists	OT manager	Twice year
Page4	WHIM and CSR-R applied on at least 6 occasions over 2-3 week period.	Notes audit				

References

- Royal College of Physicians (2020) Prolonged disorders of consciousness National guidelines.
- Joesph.T.Giacino and Kathleen Kalmar CRS-R coma recovery scale-revised administration and scoring guidelines 2004
- Shiel.A,Wilson.B,McLellan.DL et al.WHIM Head injury matrix-manual.London.Harcourt Assessment 2000.

Contribution List

This key document has been circulated to the following individuals for consultation;

Designation
Julie Elliott-occupational therapy manager
Charlotte jack occupational therapy manager (from 2019)
Charlie Docker-clinical lead consultant for trauma and orthopaedics
Tom Heafield-consultant neurologist
Sally Johns- clinical lead OT Neurology

This key document has been circulated to the chair(s) of the following committee's / groups for comments;

Committee
Therapy clinical Governance group
Occupational therapy clinical team leads

Supporting Document 1 - Equality Impact Assessment Tool

To be completed by the key document author and included as an appendix to key document when submitted to the appropriate committee for consideration and approval.

Please complete assessment form on next page;

Occupational Therapy for Profound Brain Injury Resulting in Prolonged Disorders of Consciousness (PDOC)		
WAHT-OCT-024	Page 11 of 16	Version 3

Herefordshire & Worcestershire STP - Equality Impact Assessment (EIA) Form
 Please read EIA guidelines when completing this form

Section 1 - Name of Organisation (please tick)

Herefordshire & Worcestershire STP		Herefordshire Council		Herefordshire CCG	
Worcestershire Acute Hospitals NHS Trust	x	Worcestershire County Council		Worcestershire CCGs	
Worcestershire Health and Care NHS Trust		Wye Valley NHS Trust		Other (please state)	

Name of Lead for Activity	BEVERLEY PHILLIPS
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Details of individuals completing this assessment	Name	Job title	e-mail contact
	Beverley Phillips	Clinical Lead OT	Beverley.phillips6@nhs.net
Date assessment completed	24/5/21		

Section 2

Activity being assessed (e.g. policy/procedure, document, service redesign, policy, strategy etc.)	Title:WAHT-OCT-024 Occupational Therapy for profound brain injury resulting in prolonged disorders of consciousness(PDOC)			
What is the aim, purpose and/or intended outcomes of this Activity?	Review of the guideline as the date for review has expired during COVID pandemic. To establish any amendments/updates and see if it is still relevant to current practice.			
Who will be affected by the development & implementation of this activity?	<input type="checkbox"/> Service User <input checked="" type="checkbox"/> Patient <input type="checkbox"/> Carers <input type="checkbox"/> Visitors	<input checked="" type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/>	Staff Communities Other _____	
Is this:	<input checked="" type="checkbox"/> Review of an existing activity <input type="checkbox"/> New activity			

	<input type="checkbox"/> Planning to withdraw or reduce a service, activity or presence?
What information and evidence have you reviewed to help inform this assessment? (Please name sources, eg demographic information for patients / services / staff groups affected, complaints etc.)	NICE guidelines RCOT specialist section OT clinical governance group Royal College of Physicians –national clinical guidelines.
Summary of engagement or consultation undertaken (e.g. who and how have you engaged with, or why do you believe this is not required)	OT manager OT clinical governance group Specialist consultants
Summary of relevant findings	Minimal changes to staff job titles and added new updated NICE guidelines/ Royal College of Physicians –national clinical guidelines.

Section 3

Please consider the potential impact of this activity (during development & implementation) on each of the equality groups outlined below. **Please tick one or more impact box below for each Equality Group and explain your rationale.**

Please note it is possible for the potential impact to be both positive and negative within the same equality group and this should be recorded. Remember to consider the impact on e.g. staff, public, patients, carers etc. in these equality groups.

Equality Group	Potential <u>positive</u> impact	Potential <u>neutral</u> impact	Potential <u>negative</u> impact	Please explain your reasons for any potential positive, neutral or negative impact identified
Age		✓		
Disability		✓		
Gender Reassignment		✓		
Marriage & Civil Partnerships		✓		
Pregnancy & Maternity		✓		
Race including Traveling Communities		✓		
Religion & Belief		✓		
Sex		✓		
Sexual Orientation		✓		

Equality Group	Potential <u>positive</u> impact	Potential <u>neutral</u> impact	Potential <u>negative</u> impact	Please explain your reasons for any potential positive, neutral or negative impact identified
Other Vulnerable and Disadvantaged Groups (e.g. carers; care leavers; homeless; Social/Economic deprivation, travelling communities etc.)		✓		
Health Inequalities (any preventable, unfair & unjust differences in health status between groups, populations or individuals that arise from the unequal distribution of social, environmental & economic conditions within societies)		✓		

Section 4

What actions will you take to mitigate any potential negative impacts?	Risk identified	Actions required to reduce / eliminate negative impact	Who will lead on the action?	Timeframe
	None identified			
How will you monitor these actions?	Clinical lead/specialist to oversee implementation of guideline for OT staff involved with this patient group			
When will you review this EIA? (e.g in a service redesign, this EIA should be revisited regularly throughout the design & implementation)	At the next trauma/neuro OT service review			

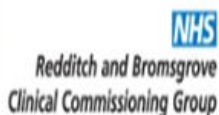
Section 5 - Please read and agree to the following Equality Statement**1. Equality Statement**

1.1. All public bodies have a statutory duty under the Equality Act 2010 to set out arrangements to assess and consult on how their policies and functions impact on the 9 protected characteristics: Age; Disability; Gender Reassignment; Marriage & Civil Partnership; Pregnancy & Maternity; Race; Religion & Belief; Sex; Sexual Orientation

1.2. Our Organisations will challenge discrimination, promote equality, respect human rights, and aims to design and implement services, policies and measures that meet the diverse needs of our service, and population, ensuring that none are placed at a disadvantage over others.

1.3. All staff are expected to deliver services and provide services and care in a manner which respects the individuality of service users, patients, carer's etc, and as such treat them and members of the workforce respectfully, paying due regard to the 9 protected characteristics.

Signature of person completing EIA	B.Phillips
Date signed	24/5/21
Comments:	
Signature of person the Leader Person for this activity	
Date signed	
Comments:	



Supporting Document 2 – Financial Impact Assessment

To be completed by the key document author and attached to key document when submitted to the appropriate committee for consideration and approval.

	Title of document:	Yes/No
1.	Does the implementation of this document require any additional Capital resources	no
2.	Does the implementation of this document require additional revenue	no
3.	Does the implementation of this document require additional manpower	no
4.	Does the implementation of this document release any manpower costs through a change in practice	no
5.	Are there additional staff training costs associated with implementing this document which cannot be delivered through current training programmes or allocated training times for staff	no
	Other comments:	

If the response to any of the above is yes, please complete a business case and which is signed by your Finance Manager and Directorate Manager for consideration by the Accountable Director before progressing to the relevant committee for approval.