

“Targeting occupational deprivation in severe brain injury using innovative sensory and functional occupational therapy groups”

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Outline

- Our service
- What is occupation?
- Service evaluation of leisure activities 2017
- Findings: Prolonged disorder of consciousness and occupational deprivation
- Occupational Therapy (OT) intervention- sensory and functional activity groups development
- Assessments of awareness
- Recent developments 2018 and future MDT reviews
- Conclusion



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Continuing care service

Previously known as “long term care” - 122 residents

Specialist needs including:

- Prolonged disorder of consciousness
- Management of challenging behaviours
- Long term tracheostomy care
- Complex spasticity & positioning management
- Varying levels of awareness/communication
- Specific nutrition requirements
- Locked in syndrome



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What is occupation?

Self care

Productivity

Leisure

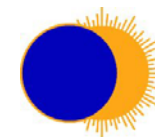


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Service evaluation

Most activities available for residents require a high level of communication, cognition and upper limb function.



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Service evaluation



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Risk of occupational deprivation?

“A state of long- lasting exclusion from meaningful and necessary occupations due to external factors. (Fenech, 2008)

- Limited leisure opportunities - focus on self care
- Less likely to leave the ward environment
- Spectator role within ward environment
- Sensory deprivation
- Sensory overload
- Limited opportunities to involve families



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Functional groups

Functional Art Group



Communicate and interact

Use planning and thinking skills

Practice upper limb movements

Make choices and feel empowered

Functional Baking Group

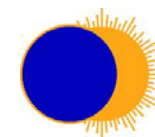


Use creativity

Socialize within a group environment

Gain a sense of achievement

MDT COGNITIVE AND COMMUNICATION REVIEW (For functional OT groups/functional 1:1)						
Resident's Name:					MPI:	
Ward:					NHS No.:	
	Date	Time	Environment	Task Observation	Duration	
Session 1						
Session 2						
Session 3						
Session 4						
					1	2
Consent	Did not attend as unavailable or declined					
	Unable to consent; session in patient's best interest					
	Consented to session					
Alertness	Asleep throughout					
	Requires several prompts to maintain alertness					
	Requires occasional prompts to maintain alertness					
	Awake for the whole session					
Participation & Attention	No attention/participation in session					
	Attends & participates for short periods with prompts (length, min.)					
	Attends & participates for short periods without prompts (length, min.)					
	Attends & participates for most of the session with prompts (length, min.)					
	Attends & participates for all/most of the session without prompts					
	Number of minutes participant attended to task					
Motivation	No/little motivation					
	Appears motivated during tasks with encouragement					
	Expresses full motivation throughout and after session attendance					
Initiation	Did not initiate any task during session					
	Requires several prompts to initiate task					
	Requires occasional prompts to initiate task					
	Independently initiates task					
Communication	Unable to communicate their needs in any way					
	Communication of their needs is difficult to interpret					
	Needs assistance to communicate their needs					
	Communicates basic needs clearly verbally or non-verbally					
	Able to communicate clearly verbally or non-verbally					
Choice Making	Unable to communicate their choices in any way					
	Communicates choices unreliably despite assistance					
	Communicates choices reliably with assistance					
	Communicates choices clearly					
Sequencing the task (Prompts: V- Verbal, G- Gestural, P- Physical)	Unable to follow task sequence despite prompting					
	Follows task sequence with prompting throughout					
	Follows task sequence with occasional prompting					
	Initiates all steps independently					
Memory (orientation/ names/ places) Specify in comments	Unable to recall any information					
	Demonstrates some memory abilities with ++ prompts i.e. 4+					
	Demonstrates some memory abilities with few prompts i.e. 1-3					
	Able to recall all required information independently					
Use of tools	Inappropriate use of objects					
	Appropriate use of objects					
	Incorrect movement sequence					
	Correct movement sequence with support					
Behaviour	"Challenging behaviour" which necessitates leaving the session					
	Several instances of 'challenging behaviour' e.g. language					
	Occasional instances of 'challenging behaviour'					
	Behaviour appropriate throughout the session					
	Initial:					



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Sensory groups



Opportunity to experience a variety of sensory stimuli within the context of an art activity.

Participants are supported to look at, listen to, touch, taste and smell a variety of sensory stimuli related to the theme of the group.

Sensory Baking Group

LOOK at raw ingredients

SMELL vanilla essence

HEAR sound of whisking

FEEL mixture on fingertips

TASTE cooked sponge



Sensory Art Group



LOOK at sensory tray objects

SMELL lavender

HEAR sound of water

FEEL soil in-between fingers

Arousal throughout session – please tick

Unarousable		Comments:
Minimal arousal- requiring 5+ prompts		
Medium- requiring 2-4 prompts		
Minimal - requiring 1 prompt		
Optimal arousal		

Behaviours at rest:

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Additional Comments:

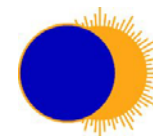
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Level of responses observed (based on SMART levels)							
Modality	Stimuli used	No response	Reflexive (blink, startle)	Reflexive (Flex/Extn pattern)	Tracking/focusing	Localising to sound	Withdrawal
Visual							
Auditory							
Tactile							
Olfactory							
Gustatory							
Motor Function							
Functional Communication							



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Our OT kitchen



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Our OT art room



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Art or Baking?

- Lifestyle questionnaire on admission
- Access to groups
- Opportunities for 1:1 sessions



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Group leaflets for families

Can participants eat the baking treats that are made?

All items made in the group are brought back to the ward to share with families, staff and those able to eat. We are careful to take into account any allergies as well as eating guidelines put in place by speech and language therapists for each individual in the group.

For those who are on a modified diet:

Most items we make in the group can be mixed with custard to change it to the appropriate consistency for people who require a modified diet.

For those who are not able to eat:

We are careful to watch for any signs of possible distress when baking to make sure that all participants are happy to be involved and are not upset by not being able to eat what is being made in the session.

What happens if signs of discomfort are shown during the baking sessions?

An occupational therapist will be present during the group sessions and responses will be monitored throughout the sessions for signs of discomfort. If participants demonstrate signs of discomfort in any way the activity will be stopped and participants will be supported to return to the ward.

If you have any questions or would like to discuss your family member's participation in the group, please speak to the ward occupational therapist.

Occupational therapy sensory baking group



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Leaflets for families

What is the sensory baking group?

The sensory baking group was started by the long term care occupational therapy (OT) team to give residents an opportunity to participate in a familiar and meaningful activity.

This group, with the support of the occupational therapy staff and RHN volunteers, gives participants the opportunity to experience a variety of sensory stimuli within the context of baking.



Participants are supported to look at, listen to, touch and smell a variety of sensory stimuli during the process of baking a treat. For example participants may be supported to touch a cold egg, smell cinnamon, stir the batter and smell freshly baked cakes.

The sensory baking group provides an opportunity for the multi-disciplinary team to review participant's responses to sensory stimuli.

Come along

_____ has been invited to attend the sensory baking group at 11am on every Friday from _____ to _____.

Sessions will take place in the **occupational therapy kitchen**.

Please inform the Occupational Therapist if you know of any recipes that your friend or family member might enjoy making for family or friends, or that they might enjoy making for the ward staff or other residents.

What's on the menu?

Participants in the sensory baking group have been previously supported to make a wide selection of items, such as:

- Gingerbread muffins
- Carrot cakes
- Lemon cookies
- Blueberry muffins
- Banana muffins



Mutual benefits of groups

- Opportunity for residents to experience leisure activities out of the ward environment.
- Opportunity to identify need for onward referrals to other areas i.e. Speech and Language/splinting review.
- Families able to attend group; opportunity to provide neuro-education
- Families share meaningful activity with participant
- Group environment provides economical, financial and time benefits to the OT service.
- Groups provide an opportunity for annual reviews of resident's cognition/ level of awareness during group participation.
- More recently, opportunity for staff to complete a review within activity/different environment other than just on the ward



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Recent developments

- Review of guidance from the Royal College of Physicians & implications for individuals in a prolonged disorder of consciousness
- Development of database
- Establishing Multi-disciplinary team reviews



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RCP guidance 2015

“All patients in PDOC should have an annual review by an appropriately skilled assessor, to review or re-confirm their diagnosis...”

“...At a minimum, this should include application of the WHIM or the CRS”



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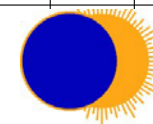
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Database

Section 3 Management and long-term care: Summary of recommendations
 3.13 Review and monitoring E1/2
 1. Patients in VS or MCS should remain under surveillance by a specialist
 2. All patients in PDOC should have an annual review by an appropriate specialist
 3. At a minimum, this should include application of the WHIM or the CF

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Wards and residents name				Following ment	Other comments	Reviews completed before 2015? b- baseline as last completed. N- no assessment completed since baseline. n/a- not in LTC before 2015.	Cog/ awareness review Completed in 2015 or 2016?	2016 Follow up Assessment Information				2017 -2018 Assessment Information								
WARD	GROUP	Surname	First Name	Other			Y/N	Type Of Intervention 2016	Type of Follow up assessment	Date Completed in 2016	Comments		OT Group/1:1 sessions?	Which as completed? (eg: FIM/FAM, MOCA, FX as, Saliva loss)	Review date (date of block)	Physical management r/v? Date and info:	Dietitian review date:	SLT r/v? Date and info:	Psychology r/v if app? Date and info:	Brief comments be in MDT su
						no formal PDOC diagnosis	baseline	N					1to 1As	V/HIM						
							baseline	N	Sensory Baking	02-Sep-16	no note on type of as.		Sensory Art	V/HIM	Dec-17	Dec-17		Dec-17		
						reports PDOC, no formal diagnosis	N						1to 1As	CRS-R	Mar-17					
						MS & Hypoxic functional	N	Y	Functional As	01-Dec-16	art		Functional Art	Functional As	Jun-17					
						States VS in interim report 2001- ? No formal as	N	N					1to 1As		May-June 17		22.06.17			
						locked in- no date	N	N							Mar-18					
						no formal diagnosis reports SMART completed in 2011 report	baseline	N							Mar-18					
						no date recorded	N	N	Functional As	01-Jul-16	baking		Functional Baking	Functional As	Jun-17					
						n/a	N/a	Y	Functional As	01-Feb-16	art		Functional Baking	Fx As	Jun-17		22.06.17			
						no recorded date	N	N					Functional Baking	Fx As	Jan-18	05/02/2018				
						n/a	N/a	N					Sensory Baking		Nov-17	Nov-17		Nov-17		
						no date recorded	baseline	N					Sensory Baking	V/HIM	Nov-17	Nov-17		Nov-17		
						N	N	Y	Functional As	01-Sep-16	baking				Apr-18					
						baseline	N	Y					1to 1As		Mar-18	Feb-18		Mar-18		
						July 2004 P ADL	N								Apr-18					
				g)	Initially VS, began showing awareness in Nov 2016 indicated by following of spoken commands/tracking of visual stimuli.	baseline	Y						Functional Art	FIM/FAM	Nov-17		Dec-17	Jan-18		
					d/c report 2013	Jul-13	Y		Functional As	01-Jan-16	art		Functional Art	V/HIM	Dec-17		Nov-17	Nov-17		
					d/c report 2013	Aug-13	N								Mar-18					
						baseline	N								Apr-18					
						baseline	N	Y	V/HIM				Sensory Baking	V/HIM	May-17					
						baseline	N	Y	V/HIM	01-Aug-16			Sensory Baking	V/HIM	10.02.17			Feb-17		



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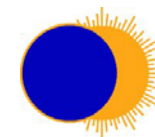
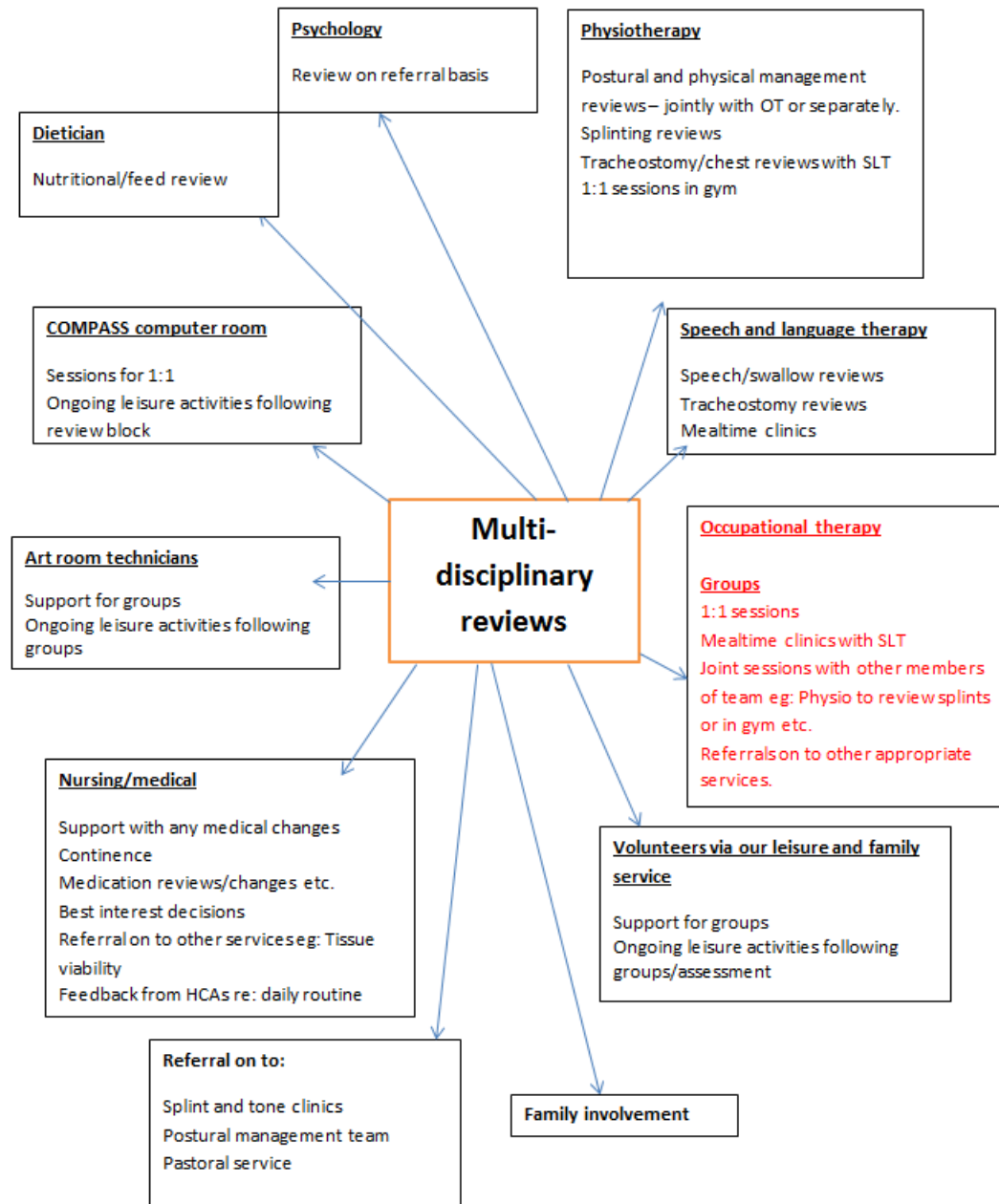
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6 week blocks, running across 60 weeks (just over 12 months rota)

[illegible]

The team



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Changes to groups

- **Set amount** of sessions to ensure enough information collected
- Paperwork formulated to ensure collecting **relevant data** throughout assessment period
- Trained OT's attending each group alongside volunteers/technicians
- Responses observed in sensory sessions categorised based on **SMART**
- **WHIM**/other outcome measures completed within or outside groups (at least 4)
- Changes to paperwork in line with funding paperwork



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SUMMARY FORM



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Multi-disciplinary team summary form

Patient Name:	NHS Number:
Diagnosis:	Date of onset:
Date of Birth:	Ward:
Date of Review:	Date of last review:
	Level of awareness at last review:
Type of assessments conducted (eg: WHIM, FIM/FAM, MOCA)	
Cognition (including memory):	
Communication:	
Physical presentation review date (guidelines/splinting review):	
Dietetics review date: _____ Refer to annual review form <input type="checkbox"/>	
Swallow: Refer to mealtime clinic form <input type="checkbox"/> Refer to trache clinic form <input type="checkbox"/> Referred for saliva review <input type="checkbox"/>	
Emotional expression and Behaviour:	

Recommendations: (e.g. referral for treatment or assessment block, change in guidelines, referral for wheelchair check)
•

Name of person contributing to summary	Discipline	Date

Date added to medical notes:	Print name:	Sign:

Challenges and positives..

Challenges:

- Staff time to complete both review sessions/groups and written paperwork
- Resident medical instability – missing sessions etc.
- Staff experience of PDoC
- Different staffing on each ward – at times more patients in a block
- Co-ordinating with team/different approaches to the process/rotating staff

Positives:

- More effective use of our current resources such as our great volunteers and art team!
- Clear structure and protocol
- More regular reviews for all residents
- Better communication with the whole team/promoting team work
- Better identification of changes/actions required (which may not always be fed back by family or ward staff if they are unfamiliar with the patient or PDoC)
- Establishment of possible changes in awareness/development of new care plans and guidelines
- Opportunity to provide feedback/demonstrations to both staff and family
- Up to date/recent and accurate information for families



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Take home points

- Occupational Therapy specialist skills allow for one activity to be adapted to meet all complex levels of disability.
- Carefully designed group activities should be considered for clients with severe brain injury, regardless of level of awareness, to enable access to appropriate leisure occupations and reduce the risk of occupational deprivation. This is an area often not met for people with complex Neuro-disability.
- Development of groups can support with assessment of multiple residents/patients
- Use of national guidance and protocols is vital for developing an effective service.
- Development of an MDT process allows for a holistic review of residents presentation



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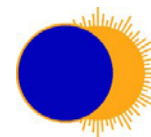
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