“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
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
What is occupation?

Self care  
Leisure  
Productivity
Service evaluation

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

Functional Art Group

Communicate and interact

Use planning and thinking skills

Practice upper limb movements

Make choices and feel empowered

Use creativity

Socialize within a group environment

Gain a sense of achievement
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

<table>
<thead>
<tr>
<th>Unarousing</th>
<th>Minimal arousal - requiring 5+ prompts</th>
<th>Medium - requiring 2-4 prompts</th>
<th>Minimal - requiring 1 prompt</th>
<th>Optimal arousal</th>
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<td>Behaviours at rest:</td>
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Additional Comments:

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Level of responses observed (based on SMART levels)

<table>
<thead>
<tr>
<th>Modality</th>
<th>Stimuli used</th>
<th>No response</th>
<th>Defensive (flinching, staring)</th>
<th>Receptive (flex/extend pattern)</th>
<th>Tracking (visual)</th>
<th>Locating to sound</th>
<th>Withdrawal</th>
<th>Behaviours observed (more room over page for comments)</th>
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<tbody>
<tr>
<td>Visual</td>
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<td>Motor Function</td>
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</table>
Our OT kitchen
Our OT art room
Art or Baking?

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

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 recipies 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
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
“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”
# Database

## 2016 Follow up Assessment Information

<table>
<thead>
<tr>
<th>Visits and residence name</th>
<th>Following week</th>
<th>Other comments</th>
<th>YM</th>
<th>Type Of Intervention 2016</th>
<th>Type of Follow up assessment</th>
<th>Date Completed in 2016</th>
<th>Comments</th>
<th>OT Group/Loclevmentioned?</th>
<th>Which as completed?</th>
<th>Review date (date of Work)</th>
<th>Physical Management Plan and Info.</th>
<th>Discharge review date</th>
<th>Brief comments to be in MDT on</th>
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## 2017 -2018 Assessment Information

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<th>Visits and residence name</th>
<th>Following week</th>
<th>Other comments</th>
<th>YM</th>
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* Royal Hospital for Neuro-disability
  A national medical charity
  Registered charity no: 205997
### Database

**SET 2:**  
- **F** = Functional, **S** = Sensory, **SM** = Social Media

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

<table>
<thead>
<tr>
<th>Block 1</th>
<th>Block 2</th>
<th>Block 3</th>
<th>Block 4</th>
<th>Block 5</th>
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</table>

**1:1 sessions**

<table>
<thead>
<tr>
<th>Block 6</th>
<th>Block 7</th>
<th>Block 8</th>
<th>Block 9</th>
<th>Block 10</th>
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<tbody>
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<td>4.3.19-12.4.19</td>
<td>15.4.19-24.5.19</td>
<td>27.5.19-6.7.19</td>
<td>8.7.19-16.8.19</td>
<td>15.8.19-27.9.19</td>
</tr>
</tbody>
</table>

**1:1 sessions**

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> Hospital for Disability

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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
## Multi-disciplinary team summary form

<table>
<thead>
<tr>
<th>Patient Name:</th>
<th>NHS Number:</th>
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<tr>
<td>Diagnosis:</td>
<td>Date of onset:</td>
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<tr>
<td>Date of Birth:</td>
<td>Ward:</td>
</tr>
<tr>
<td>Date of Review:</td>
<td>Date of last review:</td>
</tr>
<tr>
<td>Type of assessments conducted (eg: WHIM, FIM/FAM, MOCA):</td>
<td>Level of awareness at last review:</td>
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<tr>
<td>Cognition (including memory):</td>
<td></td>
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<tr>
<td>Communication:</td>
<td></td>
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</table>

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

<table>
<thead>
<tr>
<th>Name of person contributing to summary</th>
<th>Discipline</th>
<th>Date</th>
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*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
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
References:


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