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# Sensory training for arousal recovery by a transdisciplinary team for people with severe brain injury

Initiative Type

Model of Care

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Deliver

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## Summary

After extensive literature reviews into rehabilitation guidelines for adults with disorders of consciousness due to severe acquired brain injuries and sensory stimulation, the full multidisciplinary

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team identified best practice in each sensory modality to develop a cohesive and personally relevant multisensory stimulation program. Sensory Training for Arousal Recovery by a Transdisciplinary Team (STARTT) involves collaboration with the patient's family to identify salient memories and provide a recorded memory narrative by a familiar voice. The team identifies appropriate and significant sensory stimulation and prescribes a personalised program. The program was trialled with three patients who all emerged from minimally conscious state and transitioned to standard rehabilitation. The program now forms part of standard care for this patient group.

#### Key dates

Feb 2018

Sep 2019

#### Implementation sites

Brighton Brain Injury Service

## Key Contacts

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## Aim

- to identify and implement best practice rehabilitation practices for adults with disorders of consciousness due to severe acquired brain injury
- to promote arousal and functional recovery, decrease the burden of care and increase quality of life for adults with severe acquired brain injury

## Benefits

- patients emerged from their disorder of consciousness
- patients made functional gains, particularly in the areas of cognition and communication
- improvements in patient engagement in therapy
- improvements in collaborative practice with families and their involvement in patient care

## Background

The brain injury multidisciplinary team creates personally relevant multisensory stimulation program for patients. Collaboration with family and friends identifies salient memories to create a recorded memory narrated by a familiar voice.

## Solutions Implemented

Development and implementation of a personalised multisensory stimulation program that integrates best practice in each sensory modality to promote arousal recovery.

## Evaluation and Results

Patients are assessed using the Coma Recovery Scale-Revised (CRS-R) and the Music Therapy Assessment Tool for Arousal in Disorders of Consciousness (MATADOC) prior to participating and at interval during the program. Trial results showed emergence for all three patients. Because the program now forms part of standard care and evaluation is a standard part of the program, clinical data continues to build to form a clearer picture of the program's impact.

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## Lessons Learnt

- the importance of intentional implementation of emotionally salient sensory stimulation
- increased understanding of skills from other team members in order to implement the full program has resulted in more effective integration of strategies in all therapies (e.g. integration of more effective music listening and music-based strategies by other professionals)
- more effective collaboration with families
- challenges: the impact of staff movement on the level of knowledge and confidence to prescribe and implement the program

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