

# Functional Neurological Symptoms: Optimising the efficacy of inpatient treatment using a combination of psychodynamic & CBT approaches as part of an internet-based preparatory program - The Queen Square Guided Self-Help program (QGSH)

Susan Humblestone<sup>1</sup> & Jacob Roelofs<sup>2</sup>, Caroline Selai<sup>1,2</sup> & Michael Moutoussis<sup>1,3,4</sup>

1 – Neuropsychiatry Dept, National Hospital for Neurology and Neurosurgery, Queen Square, London, UK

2 - Dept of Clinical and Movement Neuroscience, UCL Queen Square Institute of Neurology, London, UK

3 - Wellcome Centre for Human Neuroimaging, University College London, London, UK

4- Max Planck - UCL Centre for Computational Psychiatry and Ageing Research, London, UK



## Functional Neurological Symptoms (FNS) are:

- Disabling symptoms without macro-structural cause - including motor & sensory symptoms and non-epileptic attacks<sup>(1)</sup>.
- They account for 6-16% of all neurology clinic referrals with an incidence of 4-12/100,000<sup>(2)</sup>.

## Chances of a good recovery are increased are by:

- Patient acceptance of the diagnosis, acknowledgement of the role that emotion may play in symptom production and a supportive social environment<sup>(3,4)</sup>.

## Chances of a good recovery may be reduced by:

- Expectation of non-recovery, non-attribution of symptoms to psychological factors, psychiatric comorbidity and receipt of health-related benefits<sup>(5,6)</sup>.

## The multidisciplinary (MDT) approach:

- Evidence supports both psychological and physical interventions for FNS<sup>(7-9)</sup> - Using an MDT team

of health professionals can maximise the impact of each form of therapy<sup>(10)</sup>.

- The National Hospital for Neurology & Neurosurgery offers specialist inpatient treatment for FNS.

## Rehabilitation is:

- Goal-oriented and implemented by a team of specialist nurses, occupational therapists, physiotherapists, cognitive behaviour therapists and neuropsychiatrists.

## A Guided Self-Help program for FNS was needed because:

- The Inpatient MDT treatment is resource intensive and has limited capacity.
- The length of admission for the NHNN inpatient program was reduced to 4wks so after learning about the diagnosis of FNS and the MDT approach there was often little time left for hands-on rehabilitation.

To allow patients to make the best use of their inpatient stay we developed a preparatory therapy, termed the **'Queen Square Guided Self-help' (QGSH)** based on psychodynamic and CBT principles.

## Designing the QGSH

The QGSH was developed around four principles:

- Teaching patients about the MDT Approach.
- Building on existing GSH approaches.
- Incorporating on-going service evaluation.
- Making the resources available for wider use.

We aimed to support each speciality involved:

- Specialist physiotherapy
- Cognitive behavioural therapy
- Occupational therapy
- Medical and psychiatric input
- Expert nursing

## By admission the patient needs to understand:

- The diagnosis of FNS and how it is reached.
- The Five Areas CBT model.
- The role of Goal setting in rehabilitation.

## Service Evaluation - In order to help continually improve the QGSH, we designed a:

- Patient Rated Outcome Measure (**PROM**)
- Clinician Rated Outcome Measure (**CROM**)

From the outset we aimed to provide the resources developed to help other teams build their own FNS services, and this was a key aim in codifying and publishing the QGSH.

## The QGSH Program

The QGSH is a course of internet-based guided self-help that runs for up to 12 weeks including original videos & patient worksheets.

## It combines:

- Therapists guiding the patient in one-to-one telephone sessions.
- Information sent weekly by e-mail and video sessions available on Youtube.
- Patients are supplied with complementary, CBT-based worksheets and exercises.
- Additional resources, such as 'Overcoming FNS'<sup>(11)</sup> are used within a flexible protocol.

The therapists include a senior OT, a consultant psychotherapist and a psychologist. They can individualise the rate and ordering of the modules for each patient.

- Adjustments such as sending resources by post can also be used.

The GSH therapists must build trust and form a therapeutic alliance. This can be done using:

- Symptom diaries at the start of GSH ensure that the patient's narrative is 'heard'.
- Exploration of the patient's beliefs about what has caused their symptoms.
- Collaborative therapy relationships that require the patient to take an active role.

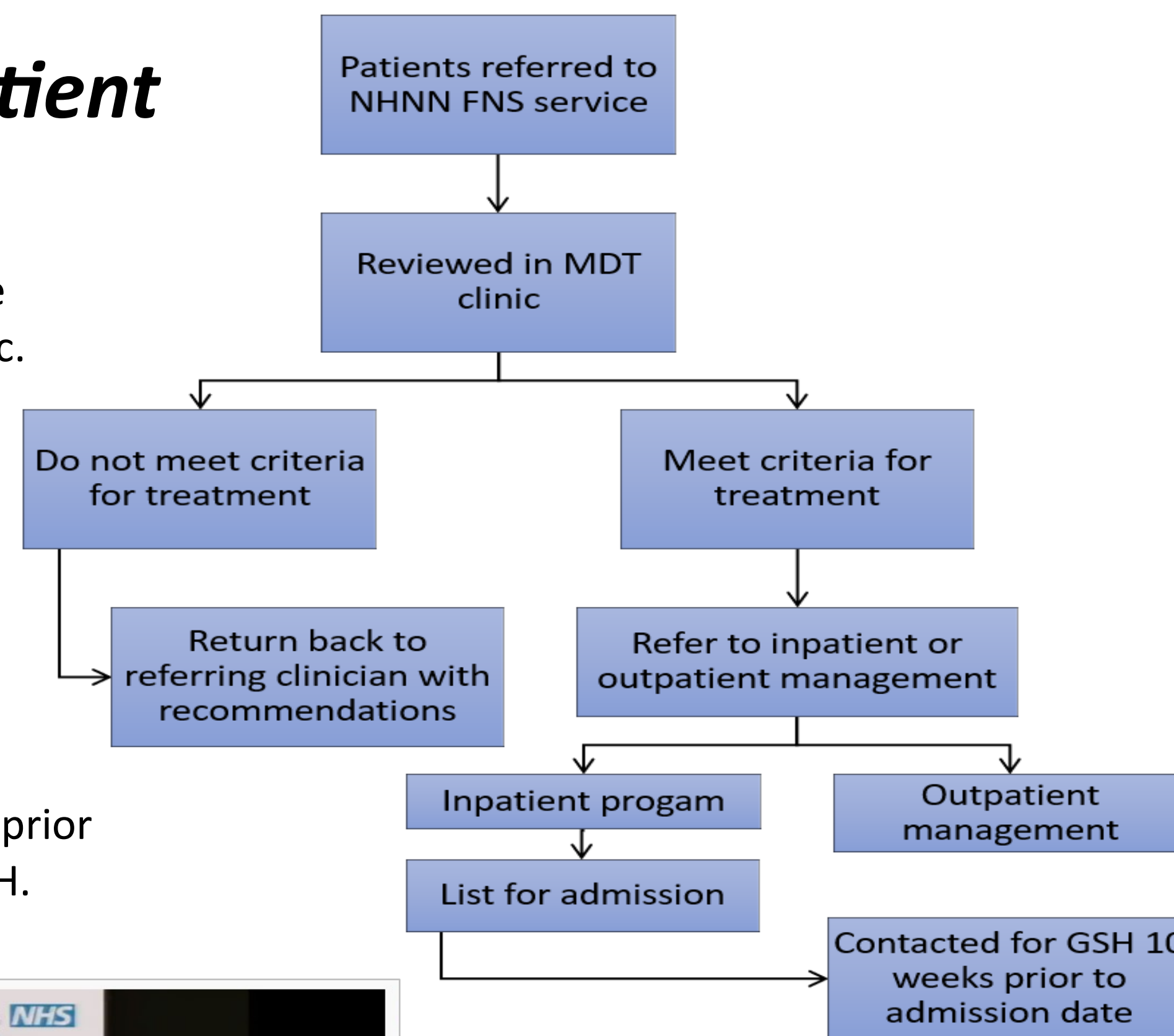
## Referral to the Inpatient program & GSH

The patients referred to the program are reviewed in a neuropsychiatry MDT clinic.

To be considered patients must show:

- A definitive diagnosis of FNS
- Acceptance of the diagnosis without requests for further investigations.
- Willingness to engage in the MDT programme.

Accepted patients are contacted 12wks prior to their admission date to start the QGSH.



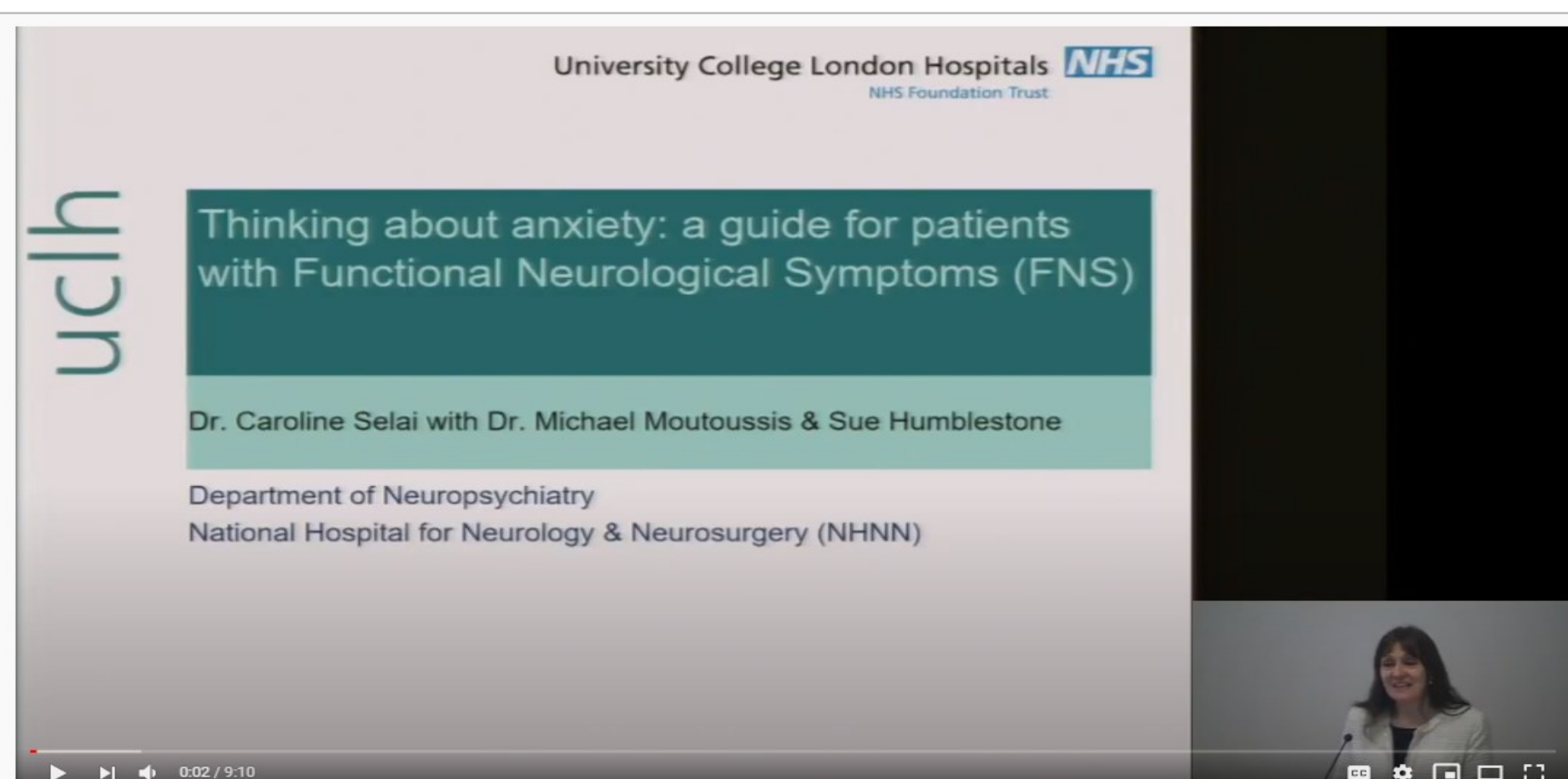
## The QGSH Modules

The videos and worksheets are structured into 12 thematic modules.

Each one comprises a video session accessed on Youtube, and a set of associated worksheets based in part on the 5-areas Approach<sup>(36)</sup>.

They are provided to patients by email and supplemented by phone-calls from the therapists

- Intro Session 1: What are Functional Neurological Symptoms?
- Intro Session 2 – Body, Role of the autonomic system and stress, Stress and Symptoms
- Goal Setting
- Intro to the 5 Areas Approach (Symptoms, behaviour and affect)
- 5 Areas Approach – Focus on Cognitions - Thinking and Feelings
- Anxiety and FNS
- Fatigue and pain
- Presentation on the workings of the Inpatient therapies and the MDT
- Thinking about the self and others: Mentalization for FNS
- Mood problems
- The role of Medications
- Avoidance in FNS



## The 'Anxiety & FNS' Module

It contains a worksheet & 2 videos. The sections are: (i) 'What is anxiety & why is it a normal part of life?' (ii) 'How anxiety manifests' (iii) 'When is anxiety helpful and when is it not' (iv) 'Anxiety in people with FNS' (v) 'Ways you can help yourself' (vi) 'An example' and (vii) 'A little exercise for you to do'.

## Next Steps

Between Jan 2017 to Dec 2019 191 patients have been through the inpatient FNS program, and 122 have taken part in the QGSH.

- Feedback is collected from both patients and staff, and is overwhelmingly positive.
- Before being paused due to the COVID-19 pandemic 10-15 patients took part at one time.

We hope this experience can be used to help improve the provision of FNS services - interested clinicians should contact UCLH.NHNN-GSHFNS@nhs.net to discuss use of the materials and ongoing collaborations.

None of the authors has any Conflicts of Interest to declare.

## References

- Diagnostic and statistical manual of mental disorders: DSM-5TM, 5th ed. - PsychNET [Internet].
- Stone J, Carson A, Duncan R, Roberts R, Warlow C, Hibberd C, et al. Who is referred to neurology clinics? - The diagnoses made in 3781 new patients. *Clin Neurol Neurosurg*. 2010 Nov;112(9):747-51.
- Reuber M, Mitchell AJ, Howlett SJ, Crimlisk HL, Grünwald RA. Functional symptoms in neurology: Questions and answers. Vol. 76. *Journal of Neurology, Neurosurgery and Psychiatry*. 2005. p. 307-14.
- Rommelfanger KS, Factor SA, LaRoche S, Rosen P, Young R, Rapaport MH. Disentangling stigma from functional neurological disorders: Conference report and roadmap for the future. *Front Neurol*. 2017 Mar 29;8(MAR).
- Sharpe M, Stone J, Hibberd C, Warlow C, Duncan R, Coleman R, et al. Neurology out-patients with symptoms unexplained by disease: Illness beliefs and financial benefits predict 1-year outcome. *Psychol Med*. 2010 Apr;40(4):689-98.
- Gelauff J, Stone J, Edwards M, Carson A. The prognosis of functional (psychogenic) motor symptoms: A systematic review. *J Neurol Neurosurg Psychiatry*. 2014;85(2):220-6.
- Sharpe M, Walker J, Williams C, Stone J, Neurology JC, 2011 U, et al. Guided self-help for functional (psychogenic) symptoms: A randomized controlled efficacy trial. *Neurology [Internet]*. 2011
- Conwill M, Oakley L, Evans K, Behavior AC-E8, 2014 U. CBT-based group therapy intervention for nonepileptic attacks and other functional neurological symptoms: a pilot study. Elsevier [Internet].
- Demartini B, Batla A, Petrochilos P, Fisher L, Edwards MJ, Joyce E. Multidisciplinary treatment for functional neurological symptoms: a prospective study. 2014;
- Hubschmid M, Aybek S, Maccaferri GE, Chocron O, Gholamrezaee MM, Rossetti AO, et al. Efficacy of brief interdisciplinary psychotherapeutic intervention for motor conversion disorder and nonepileptic attacks. *Gen Hosp Psychiatry*. 2015 Sep 1;37(5):448-55.
- Williams C, Kent C, Smith S, Carson A, Sharpe M, Cavanagh J. Overcoming functional neurological symptoms: A five areas approach. *Overcoming Funct Neurol symptoms A five areas approach*. 2011

