



## The why?

**In May 2022** –The therapy team redirected funding to set a new Neuro Outlier Service at East and North Herts. The service was set up to support any Neurological patients, that did not have a clear diagnosis of stroke within the hospital. The main aims of the new service were to; Reduce the workload of the stroke therapy service, Improve patient experience and enable the stroke service to focus on improving their Sentinel Stroke National Audit Programme data (SSNAP).

## The journey

The service is delivered by a specialist Physiotherapist and Specialist Occupational Therapist, both coming from a background in Neurology. Initially, the service started off seeing a large number of patients who were referred by therapy staff across the hospital. As a new service the team tried to see all patients who were referred but due to numbers this was not always possible. The team enrolled on the Royal College of Nursing leadership Course in July 2022 – as part of the course they decided to perform a service evaluation to better understand both the need for the service and what impact it made for the patients and the organisation.



## Why are we a specialist service?

- We treat a wide range of patients with varied neurological conditions, some of which are rare and often misunderstood. (E.g. Functional Neurological disorder-FND. These patients are a particularly complex patient group who are often mismanaged in acute settings. FND is the most common condition seen by Neurology after Migraine but sadly, the condition is very misunderstood. There is currently no process or pathway at the Lister for these patients).
- The team are passionate about improving patient pathways and experience to support not only this complex patient group but all neurological patients that fall outside of the Stroke therapy teams service.

## Our patient population

DX code	Diagnosis	Number of patients seen	% of patients
1	Acquired Brain Injury (ABI)	11	4%
2	Spinal cord Injury (SCI)	15	5%
3	Functional Neurological disorder (FND)	45	16%
4	Vestibular	37	13%
5	Stroke	29	10%
6	Sub-dural Haematoma/ Sub-arachnoid Haemorrhage SDH/SAH	18	6%
7	Other	130	46%
	Total	285	

## What have we done?

### Education and Training

- We attended further training on Functional Neurological Disorder (FND), Spinal cord Injury (SCI) and Traumatic brain injury (TBI) to have a good evidence base for the therapy we were providing.
- We attended the Therapy team meeting and surveyed staff to find out about their awareness of the service -This showed that work was needed to educate staff on what the service was there for and how we could help their patients.
- We facilitated education sessions for staff groups including therapy and neurology.
- Presented at the trusts Quality huddle
- We were featured in the Trust News- about us section- this all helped to raise awareness of the service

### Learning from others

- We reached out to other trusts to see how they run their Neuro-outliers service
- Met with Claire Cutting @ West Herts who helped us look at and refine our criteria with a view to reducing our caseload.
- We also met with Dr Natalie Pattison, who recommended assessment tools (EQ5d) and process mapping the service for specific patients - We chose to focus on Functional Neurological Disorder (FND) patients due to recent poor patient experience.
- We also made sure to meet regularly with our clinical supervisor and the neurology to discuss barriers and enablers for the service.

## Learning from small tests of change

- PDSA 1:** EQ5D trialed to assess patient function- (Not adopted) the results were too limited, we felt it was not sensitive enough for our patients, not enough progress in acute phase to see a change
- PDSA 2:** Early communication regarding FND- (Not adopted) Stroke nurses were keen for this to be adopted however, the Neurologists felt this wasn't appropriate due to the nature of the diagnosis
- PDSA 3:** Emailing the Neurologists weekly for FND numbers outpatients/inpatients- This has worked really well and the team have seen some patients early in clinic and prevented admissions for these patients.



## What matters to Therapy staff Survey results

WMTY Therapy team survey- Feb 2023 (N= 12)	WMTY Therapy team survey- June 2023
31% of staff strongly agreed that they understood the role of the Neuro-outliers service	100% of staff strongly agreed that they understood the role of the Neuro-outliers service
53% of staff felt confident in making a referral to the Neuro-outliers service	100% of staff felt confident in making a referral to the Neuro-outliers service
54% of staff understood the appropriate patient population to refer Neuro-outliers service	100% of staff understood the appropriate patient population to refer Neuro-outliers service
40% wanted further information on the service	25% wanted further information on the service
16% of staff did not feel confident in referring to the service	0% of staff did not feel confident in referring to the service
61% of staff wanted further training from the team	25% of staff wanted further training from the team
77% of staff wanted further training on particular conditions	75% of staff wanted further training on particular conditions
85% of staff felt reassured the team were there to help where needed	100% of staff felt reassured the team were there to help where needed

## Patient feedback form results and comments

What matters to our patients? (N= 5)
50% of patients rated their care 3 or 4 out of 5 before Neuro-outliers service input
100% of patients rated their care 4 or 5 out of 5 after Neuro-outliers therapy treatment
75% of patients rated their admission to Lister 5 out of 5
100% of patients felt listened to and understood
75% of patients felt staff knew enough about their condition to help them
50% felt they received enough information to understand their diagnosis

My mobility levels increased with the teams support

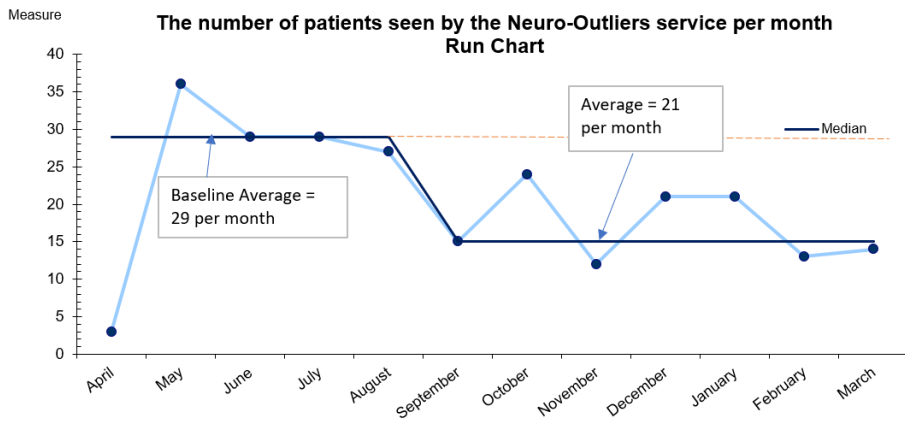
They helped me to understand my condition

I would have liked more time with the team

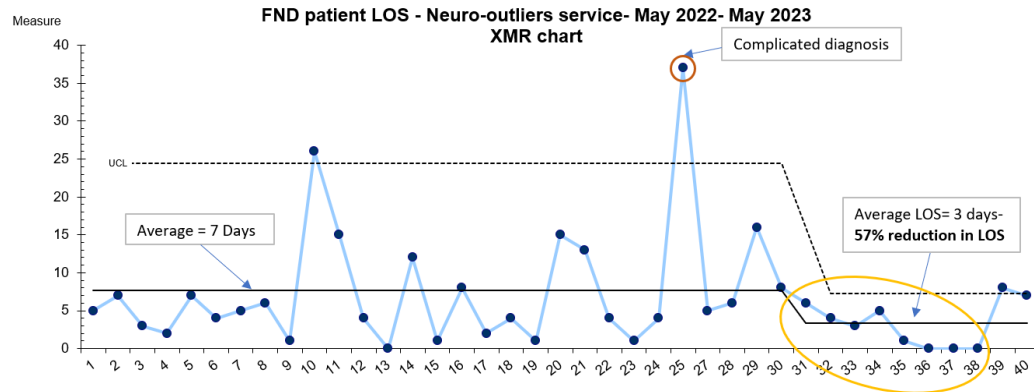
I felt supported and listened to

## Our Impact to date

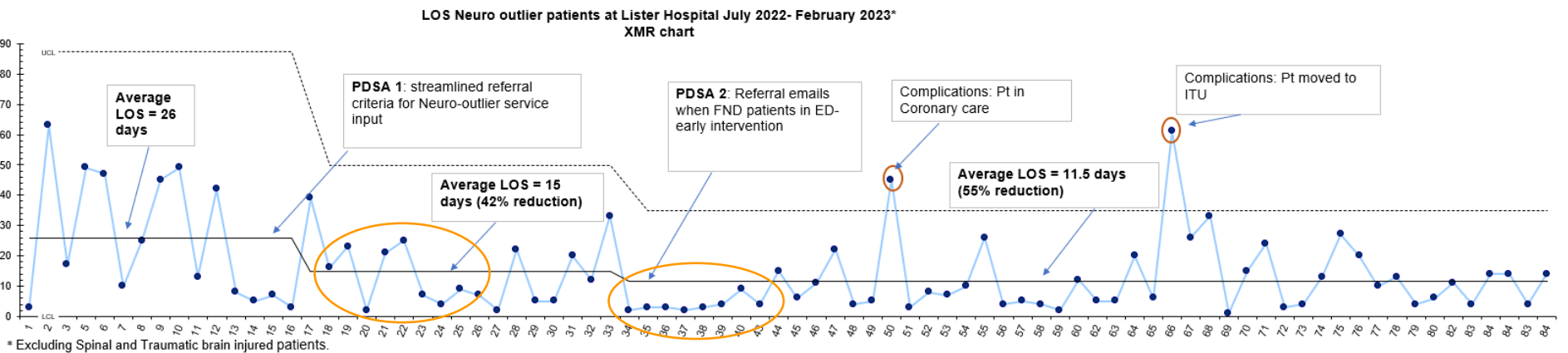
### Average number of patients seen by the service



### FND patient Length of stay



## Our overall patient length of stay



## Sustainability: Our carbon footprint

Source: Care pathways guidance on appraising sustainability (Sustainable Development Unit, 2015)	
Available from: Sustainable Development Unit (SDU) carbon footprints of various units of healthcare activity   CSH Networks (sustainablehealthcare.org.uk)	
1st improvement = 37.9*11 bed days = 416.9 kgCO <sub>2</sub> e *18 (patients) = 7504.2 kgCO <sub>2</sub> e	
2nd improvement = 37.9*14.5 bed days= 549.55 kgCO <sub>2</sub> e * 49 (patients) = 26,927.95 kgCo <sub>2</sub> e	
TOTAL REDUCED Co <sub>2</sub>	<b>34432.15 kgCO<sub>2</sub>e</b>
KgCo <sub>2</sub> e per inpatient bed day = 37.9	

## Cost savings\*

Estimated average Bed day cost = £300	
11 days x 18 pts	£59,400.00
14.5 days x 49 pts	£213,150.00
Total saved	<b>£272,550.00</b>
*estimated cost without ward rounds etc	
social impact	Improved patient well being, improved patient experience and quicker discharges
* This project did not deliver any cash releasing savings- These figures show the bed day cost reduction for these patients and this will have helped to improve flow throughout the hospital	

## Acknowledgements

Anna Cull, Lindsay Potter, Sara Scott, Tracey Smith, Vidya Rajbhoj, RCN facilitators team, Tania Dunn, Emma Bates, Natasha Tanner.

## Next steps

- To continue to collect data for FND patients coming into the Lister
- Make links with the Early Supported Discharge service
- Develop a information leaflet for FND Patients
- Create a tag on Nerve centre so these patient are easily Identified
- Referral form for FND patients to be directly referred to Neuro Outliers team from ED
- Work alongside Danesbury and outpatient neurology to fit the recently released 'Optimum clinical pathway for adults' focusing primarily on local management in local services.
- Encourage further co-production with patient partners

## References

FNDhope.org, National Neurosciences Advisory Group (ed.) (2023) *Optimum clinical pathway for adults: Functional neurological disorder*, Neurology Academy.