

Introduction

Almost 425 million people worldwide have diabetes mellitus.¹ The most frequent complication, diabetic sensorimotor polyneuropathy (DSP), affects up to 50% of diabetic individuals, with between 30% and 50% of those developing painful diabetic neuropathy (PDN).^{2,3} For patients with severe pain refractory to conservative therapies, spinal cord stimulation is an effective therapy.⁴

Despite the large number of patients suffering with severe PDN, SCS implantation rates for PDN remain low. We believe this is because our referral pathways have not yet reacted to the new evidence and SCS is not always being offered when appropriate. We describe here our efforts to improve care.

Aims

What are we trying to accomplish?

Offer SCS as a treatment option to all appropriate patients with severe PDN.

How do we know that a change is an improvement?

Increased numbers of successful SCS implantations for PDN on the UK National Neuromodulation Registry (NNR).

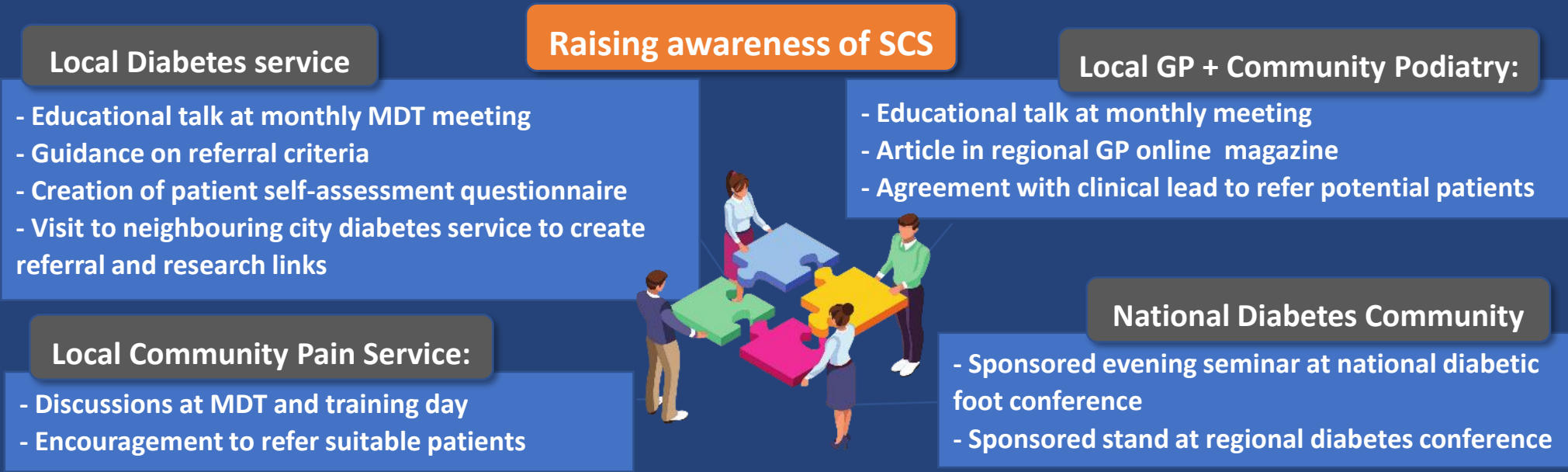
What change can we make that will result in an improvement?

Increase awareness that SCS is an effective therapy for PDN.
Create formal referral pathways for patients to access SCS.

Actions

In the UK, care pathways for diabetic patients are complex. Patients interact with multiple care providers (primary care, podiatry service, diabetes clinic).

We **raised awareness** of SCS with a range of outreach activities, established **referral pathways** and empowered patients with a **self-assessment questionnaire**.



Patient self-assessment questionnaire

Painful Diabetic Neuropathy Patient Questionnaire

This questionnaire is to evaluate your current diabetic neuropathy symptoms and whether newer treatments may be an option for managing your pain symptoms:

Diagnosed with Diabetes
Attempts to control patient's glucose have been made (medications, lifestyle, diet, etc)

Do you know your A1c? %

Diagnosed with Diabetic Neuropathy

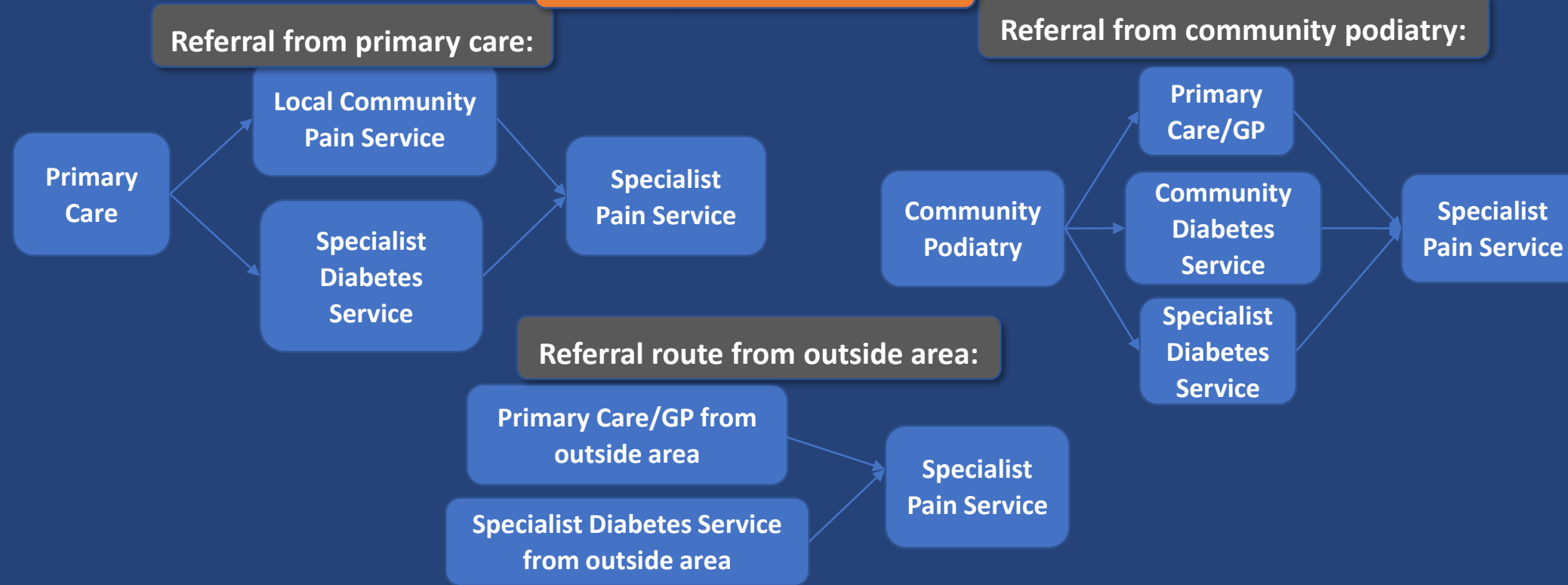
Have tried 2 or more prescription medications, like gabapentin or pregabalin

Pain of 5 or more on a scale of 1-10

Do you experience numbness burning tingling cold sensation

Please hand this form back to your healthcare professional

Creating referral pathways



Measuring success

Quantifying the impact of these activities will be best done through data collected on the UK National Neuromodulation Registry (NNR)

We will report our local referral and implant data to the INS community in due course.

Conclusions

Research evidence of an efficacious treatment is only beneficial if we can effectively deliver treatment to patients.

We are working to make SCS a known and viable option for PDN sufferers in the UK.

1. Feldman EL, Callaghan BC, Pop-Busui R, et al. Diabetic neuropathy. *Nat Rev Dis Primers*. 2019;5(1). doi:10.1038/S41572-019-0092-1
2. Davies M, Brophy S, Williams R, Taylor A. The prevalence, severity, and impact of painful diabetic peripheral neuropathy in type 2 diabetes. *Diabetes Care*. 2006;29(7):1518-1522. doi:10.2337/DC05-2228
3. Peltier A, Goutman SA, Callaghan BC. Painful diabetic neuropathy. *BMJ*. 2014;348. doi:10.1136/BMJ.G1799
4. Petersen EA, Stauss TG, Scowcroft JA, et al. Effect of High-frequency (10-kHz) Spinal Cord Stimulation in Patients With Painful Diabetic Neuropathy: A Randomized Clinical Trial. *JAMA Neurol*. 2021;78(6):687-698. doi:10.1001/JAMANEUROL.2021.0538