The challenge of implementing Fampridine into the West of **Scotland MS Service**

Introduction

In April 2020 Fampridine was approved by the Scottish Medicines Consortium (SMC) for the improvement of walking in adult patients with multiple sclerosis who have walking disability, defined as EDSS (expanded disability status scale) 4-7. It was the first symptomatic medication to address walking disability in people with MS.

Treatment with this drug requires an assessment of walking disability, then a 4 week trial of Fampridine followed by a review to assess benefit. If treatment is successful, long term follow up is required. If there is no benefit, treatment would be discontinued.

There are approximately 3,500 patients under the care of the West of Scotland MS service. Research shows that 3 out of 4 people with MS will experience walking impairment at some point in their life (Filli et al 2018) so there were potentially more than 2,000 patients in the service who were eligible for Fampridine.

In view of the new SMC recommendation, the MS Service sought to provide access to Fampridine for patients with MS in NHS Greater Glasgow and Clyde. There was no additional resources available and this needed to be provided within the service capacity.

Stage 1 – Pilot mobility clinic March – June 2021

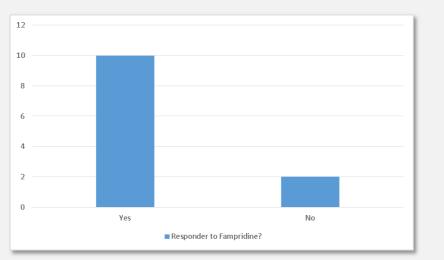
The MS Team decided to test the concept of an AHP-led mobility clinic. This was staffed by a physiotherapist and pharmacist who were both independent prescribers. 12 MS patients were assessed for Fampridine suitability

All patients underwent a face to face physiotherapy assessment, including outcome measures (T25FTW, MSWS-12 and TUAG). The pharmacist assessed their medication for any drug interactions and calculated creatinine clearance. Patients received individual counselling and were able to ask questions about starting Fampridine. This enabled informed consent to be given.

If suitable, the pharmacist organised the prescription and provided a 4 week supply of the drug. The patient was reviewed between weeks 2 and 4 and the clinical assessments were repeated. The patient had contact details for the physio for any further queries.

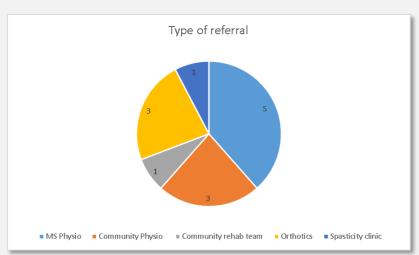
Results:

- n=12
- 10 responders (83% respond rate).
- 1 patient hospitalised with UTI.
- 2 patients required extended trial 1 patient did not respond, 1 patient responded but did not want to continue.



In addition to trial of Fampridine the physiotherapist was able to offer additional symptomatic management options in the clinic (e.g. walking aids and exercise advice). The pharmacist was able to deal with medication issues (e.g. prescriptions and polypharmacy).

7 patients also benefitted from at least one or more onward referrals.



Stage 1 – Pros and Cons

Pros:

- Streamlined process with standardised physiotherapy mobility assessment and a range of outcome measures.
- Additional value of physio and pharmacy assessment and intervention with additional needs being identified and addressed.
- Queries dealt with by pharmacist/physio freeing up MS nurse & consultant time • Face to face counselling and education allowing for an informed decision.
- Cons: Additional resource required

Stage 2 – Remote Assessment July 2022 – July 2023

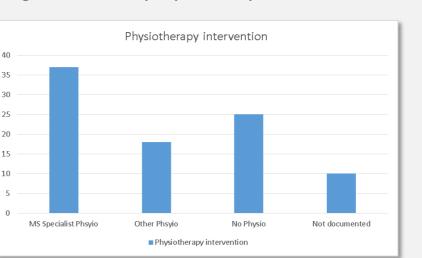
By July 2022, there were more than 150 patients waiting for Fampridine assessment. Due to capacity issues, the AHP led mobility clinic could not continue so remote assessment and trial was proposed.

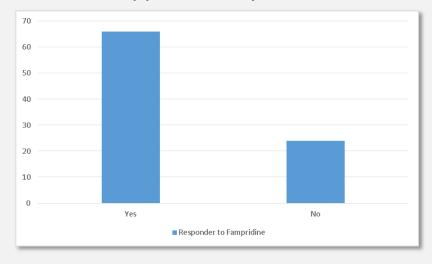
Clinicians in the MS service could forward details of patients who were interested in Fampridine to a neurology co-ordinator (non-clinical). Written details about Fampridine and the assessment process would be sent to the patient and if they wanted to go ahead with a trial, they contacted the co-ordinator providing an MSWS-12 score. U&E's and drug interactions would be checked by their consultant and if suitable, a 4 week trial of Fampridine would be sent by post. After 4weeks trial of Fampridine, the patient called the co-ordinator back with their repeat MSWS-12 score. If this had reduced by 8 points or more, indicating a positive response, ongoing prescription would be organised.

Remote assessment and trial of Fampridine has now been in place for more than a year and 305 patients have been referred for trial. However, only 90 (30%) of these patients contacted the neurology coordinator for information. Initially there was a back log of patients waiting for trail so it is difficult to estimate the number of referrals/month. However in the last 6 months, referrals had settled down to approximately 10/month.

Results:

- n=90 (73% response rate)
- 7 patients were unsuitable after screening.
- 5 patients decided not to continue.
- 12 patients stopped due to side effects. (e.g. insomnia, palpation, pain and diarrhoea)





There was no physiotherapy involvement in the remote assessment process. So patient notes were reviewed to examine physiotherapy intervention in the year prior to referral for Fampridine.

2 patients were referred back to the MS Physio as they felt benefit from Fampridine but were confused with the remote process. They were assessed by physio and had another trial. Both were responders and went on to continue with Fampridine.

None of these patients would have had input from the neurosciences pharmacist.

Stage 2 - Pros and Cons

Pros:

- Streamlined process which allowed timely access to Fampridine.
- Cleared the waiting list and prevented complaints.

Cons:

- Only 30% of patients referred contacted administrator for trial.
- The process is more open to manipulation as only the subjective MSWS-12 was used to assess benefit.
- Face to face assessment was not standard.
- Did not offer additional benefit of physiotherapy or pharmacy review.
- Queries were directed to MS Consultants or MS Nurses adding to their workload.

Discussion themes

This review highlights several points and questions for further discussion.

Fampridine can be prescribed remotely using the MSWS-12 without the need for additional resource. This process allowed patients to opt in to treatment. It also helped the service deal with the backlog of patients on the waiting list created by the pandemic and the huge interest in trying the drug.

Only 30% of patients put forward for remote trial opted into this process. Why was this the case? Was the process too complex? Were they concerned about side effects? The remote administration process did not have timely access to a clinician. Anecdotally, this resulted in an increase in queries being directed at the MS nurses and consultants.

The remote administration process is more open to manipulation as the MSWS-12 is the only measure of benefit. It would be easy for patients to ensure that their score fitted the required response criteria without the clinician being aware until they were assessed at a later date. There is more of a risk that patients will remain on an ineffective drug at unnecessary expense. Is this also the case with other symptom management drugs? A recent paper reported polypharmacy was present in 1 in 4 people with MS (Chertcoff A et al 2023). The pilot clinic had the added benefit of a neurosciences pharmacist being available to review medication.

Remote versus Face to Face (F2F) assessment. Many patients are now reviewed by telephone or video rather than F2F. Remote assessment does not identify the subtle complexities of mobility impairments. Managing these complex symptoms in a timely manner can prevent people developing secondary problems such as deconditioning and falls. Managing these issues can have wideranging effects such as keeping people in work, maintaining active family life, preventing other co-morbidities from developing and reducing hospital admission.

The added value of physiotherapy and pharmacy. The physiotherapist could offer other treatment options (e.g. walking aids, exercise, and orthotics). The pharmacist dealt with calculating creatinine clearance, interactions, medication advice and prescriptions. Additional needs could be identified and addressed at the time or through onward referral. Queries were dealt with by the pharmacist and physio freeing up consultant and nurse time

Unmet need. The initial pilot identified 75% of patients who required additional physiotherapy. 41% of patients were reviewed by an MS specialist physiotherapist in the year prior to being referred for Fampridine. Again this points to an unmet need. This is backed up by a recent review which states that MS patients are under referred to physiotherapy (Gopal et al2023). The recent MS Society report My MS My Needs found 38% of responders had an unmet physiotherapy need.

Response rate(RR). This was better than expected in both processes. Literature suggests a 30-40% RR (Hobart et al 2019) however the pilot had an 83% RR and the remote assessment had a 73% RR.

Greater Glasgow and Clyde



Acknowledgements: Claire Saleh, Neurosciences Pharmacist Karen Clark, Neurology Co-ordinator

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